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Final Supplemental Environmental Impact Statement

**Clarification of Language in the 1994 Record of Decision
for the Northwest Forest Plan
National Forests and
Bureau of Land Management Districts Within the Range of the
Northern Spotted Owl**

Proposal To Amend Wording About The Aquatic Conservation Strategy



Western Oregon, Western Washington, and Northwestern California

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Readers should note that the Secretary of Agriculture and the Secretary of the Interior are the responsible officials for this proposed action. Therefore, no administrative review (“appeal”) through the Forest Service will be available on the Record of Decision under 36 CFR 217, and no administrative review (“protest”) through the Bureau of Land Management will be available on the Record of Decision under 43 CFR 1610.5-2. Because there is no administrative review of the decision, the Record of Decision will not be signed until 30 days after the Notice of Availability for the Final SEIS appears in the Federal Register (see 40 CFR 1506.10(b)).

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**Final Supplemental Environmental Impact Statement
For Clarification of Language in the 1994 Record of Decision for the
Northwest Forest Plan; National Forests and Bureau of Land Management
Districts Within the Range of the Northern Spotted Owl**

Proposal to Amend Wording About The Aquatic Conservation Strategy

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Abstract

The Secretaries of Agriculture and the Interior propose limited changes to language about how to demonstrate that projects follow the Aquatic Conservation Strategy, part of the Northwest Forest Plan. Projects needed to achieve Northwest Forest Plan goals have been delayed or stopped due to misapplication of certain passages in the Aquatic Conservation Strategy. The agencies are responding to the underlying need for increased agency success planning and implementing projects, to the extent that the current wording has hindered the agencies ability to follow Northwest Forest Plan principles and achieve its goals. The goals of the Northwest Forest Plan cannot be achieved without project implementation.

Three alternatives are considered in the Final Supplemental Environmental Impact Statement, No Action, the Proposed Action, and Alternative A. No Action would not change existing language within the Aquatic Conservation Strategy. The Proposed Action and Alternative A would make limited changes to clarify documentation requirements. Alternative A is the Preferred Alternative. If the Preferred Amendment is approved, implementation of the range of projects envisioned under the Northwest Forest Plan would be more likely. Land managers would more successfully demonstrate that projects follow the ACS.

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SUMMARY

Introduction/Purpose and Need

The Secretaries of Agriculture and the Interior propose limited changes to language about how to implement the Aquatic Conservation Strategy (ACS). The ACS is an integral part of the Northwest Forest Plan. The ACS is intended to maintain and restore the ecological health of watersheds and aquatic ecosystems within the Northwest Forest Plan area. The ACS includes language that has been interpreted to mean that decision-makers must demonstrate that a proposed project will attain all of the ACS objectives. These objectives were never intended to be site-specific standards; rather, they were intended to be achieved at the fifth-field watershed scale and broader, over the long term. Confusion related to the existing language has hindered federal land managers' ability to plan and implement projects needed to achieve Northwest Forest Plan goals.

The Proposed Amendment

The proposed amendment would make limited changes to language within Attachment A of the 1994 Record of Decision (ROD) for the Northwest Forest Plan. These changes would amend Forest Service and Bureau of Land Management plans throughout the Northwest Forest Plan area. The limited changes would clarify that the proper scale for federal land managers to evaluate progress toward achievement of the ACS objectives is the fifth-field watershed and broader scales. The changes would also clarify documentation requirements for land managers to demonstrate that projects follow the ACS. It would remove the expectation that all projects must achieve all ACS objectives, but would reinforce the role of watershed analysis in providing context for project planning. Current land allocations, standards and guidelines, and Northwest Forest Plan goals and objectives would be retained.

Alternatives Considered

Three alternatives - No Action, the Proposed Action, and Alternative A - are considered in detail in this Final Supplemental Environmental Impact Statement. The Forest Service and Bureau of Land Management received many comments expressing concern that the Proposed Action would change the original intent of the ACS. Alternative A was developed to mitigate these concerns.

The Consequences of No Action

If the proposed amendment is not approved, implementation of the range of projects envisioned under the Northwest Forest Plan is less likely. Projects intended to achieve Northwest Forest Plan goals would continue to be delayed or stopped due to misapplication of certain passages in the ACS. Land managers would continue to have difficulty demonstrating that projects follow the ACS.

The Consequences of the Action Alternatives

If the proposed amendment is approved, implementation of the range of projects envisioned under the Northwest Forest Plan would be more likely. Land managers would more successfully demonstrate that projects that comply with standards and guidelines follow the ACS.

Monitoring

The agencies have developed a monitoring plan to assess progress toward attainment of ACS objectives across the Northwest Forest Plan area. The Aquatic Riparian Effectiveness Monitoring Plan (AREMP) was approved in March 2001 and published in 2003 (Reeves et al. 2003). Under the AREMP, the condition of various watersheds across the Northwest Forest Plan area will be evaluated. Over time, AREMP will show whether watershed conditions are improving. The AREMP will provide information in a decade or more at the province scale. Monitoring also occurs as a part of each Resource Management Plan.

Decision Factors

The decision will be based on which alternative increases success planning and implementing projects that follow Northwest Forest Plan principles and achieve its goals, and has the least risk of changing the original intent of the ACS.

CHAPTER 1. PURPOSE OF AND NEED FOR ACTION

Introduction

The Secretaries of Agriculture and the Interior propose limited changes to language in National Forest Land and Resource Management Plans and Bureau of Land Management Resource Management Plans within the Northwest Forest Plan area (see Figure 1) to clarify the Aquatic Conservation Strategy described within these plans.

In 1994, the Secretaries of Agriculture and the Interior signed the Northwest Forest Plan, which amended agency management plans as part of the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*. The 1994 Record of Decision resulted in several amended resources management plans, however agencies continue to refer to the coordinated management direction as the Northwest Forest Plan.

The Aquatic Conservation Strategy (ACS) is an integral part of the Northwest Forest Plan. The ACS was developed to maintain and restore the ecological health of watersheds and aquatic ecosystems within public lands. The ACS includes language that has been interpreted to establish an expectation that may be impossible for projects to meet. These interpretations hinder federal land managers' ability to plan and implement projects needed to achieve Northwest Forest Plan goals. The Secretaries of Agriculture and the Interior propose to amend the Northwest Forest Plan to clarify the documentation required to demonstrate that projects follow the ACS.

This Supplemental Environmental Impact Statement (SEIS) supplements information in the Northwest Forest Plan Record of Decision and FSEIS. The 1993 Forest Ecosystem Management Analysis Team (FEMAT) report provides the scientific basis for the Northwest Forest Plan and Aquatic Conservation Strategy.

The Forest Service (FS) and Bureau of Land Management (BLM) prepared this Final SEIS in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. The FS and BLM are also referred to as "the agencies." An Interagency Interdisciplinary Team (IDT) was chartered to evaluate the potential effects of the proposed amendment (see List of Preparers).

The area affected by the proposed amendment is referred to as the Northwest Forest Plan area. In this SEIS, Land and Resource Management Plans for National Forests and Resource Management Plans for BLM Districts are collectively referred to as “Resource Management Plans or RMPs.” Resource Management Plans for the following administrative units would be amended:

- Salem, Eugene, Roseburg, Medford, and Coos Bay BLM Districts in Oregon
- Klamath Falls Resource Area of the Lakeview BLM District, also in Oregon
- Arcata, Redding, and Ukiah BLM Field Offices in California
- The King Range National Conservation Area Management Plan in the Arcata BLM Field Office, also in California
- Gifford Pinchot, Olympic, Mt. Baker-Snoqualmie, Okanogan, and Wenatchee National Forests in Washington¹
- Mount Hood, Willamette, Umpqua, Siuslaw, Siskiyou, Rogue River, Deschutes, and Winema National Forests in Oregon
- The Six Rivers, Klamath, Lassen, Mendocino, Modoc, and Shasta-Trinity National Forests in California

The proposed amendment would also affect management of the Coquille Forest. These lands are owned by the Coquille Indian Tribe, are part of the Coquille Indian Reservation, and are held in trust by the United States. An Act of Congress in 1996 transferred ownership of about 5,400 acres of federal land within the Northwest Forest Plan transferred to the Coquille Indian Tribe. The Act required that Coquille Forest be managed subject to the standards and guidelines of federal forest plans on adjacent or nearby federal lands, therefore the Coquille Forest would be affected by this proposed amendment to the Coos Bay BLM Resource Management Plan.

Throughout this document, the 1994 Northwest Forest Plan Final Supplemental Impact Statement is referred to as the Northwest Forest Plan FSEIS, while the 2003 ACS Final Supplemental Impact Statement is referred to as the Final SEIS.

¹ The proposed amendment to National Forest Land and Resource Management Plans are considered significant amendments under the National Forest Management Act.

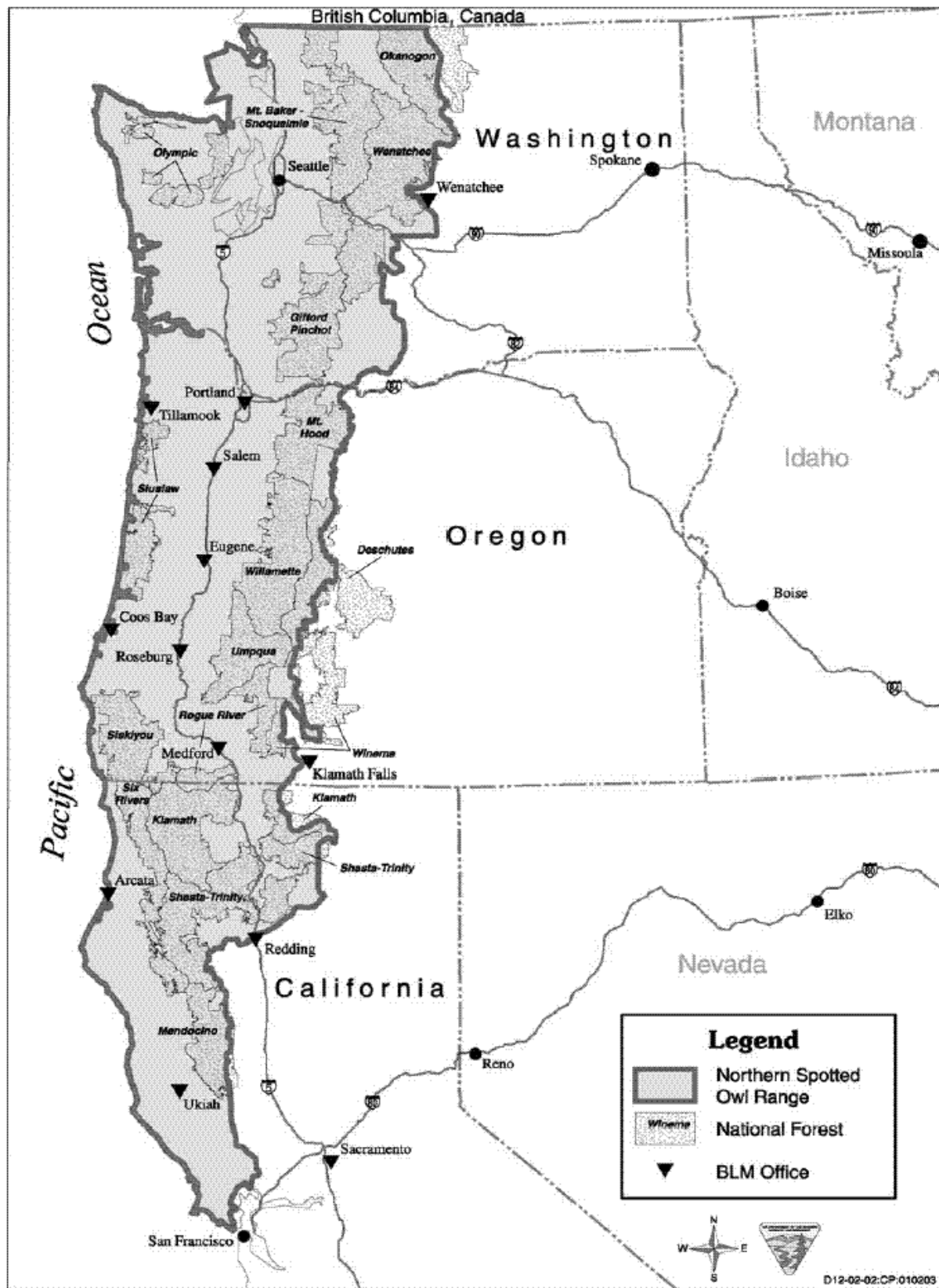


Figure 1. Northwest Forest Plan Area Map

Purpose and Need

Need

The Northwest Forest Plan includes the following principles (p. 3 of the 1994 Record of Decision):

- "...to protect the long-term health of our forests, our wildlife and our waterways ..."
- "Where sound management policies can preserve the health of forest land, timber sales should go forward."
- "...to produce a predictable and sustainable level of timber sales...that will not degrade or destroy the environment."

The goal of the ACS is stated in several places, including page B-9 of the Northwest Forest Plan Record of Decision:

- "to maintain and restore the ecological health of watersheds and the aquatic ecosystems within them."

Projects intended to achieve Northwest Forest Plan goals have been delayed or stopped due to misapplication of certain passages in the ACS. Specific language has been interpreted to mean that every project must achieve all ACS objectives at all spatial and temporal scales. This interpretation suggests land managers must demonstrate that a project will maintain existing conditions (or lead to improved conditions) at every spatial and temporal scale. Any project that may result in site-level disturbance to aquatic or riparian habitat, no matter how localized or short-term, could be precluded under this interpretation. This interpretation establishes an impossible expectation for demonstrating that a project follows the ACS.

Current language has also been interpreted to imply too simplistic a relationship between projects and attainment of ACS objectives by requiring a "finding of consistency" with ACS objectives for all projects. Projects must be considered in a watershed-scale or broader context to determine whether potential effects to aquatic ecosystems are acceptable.

The agencies are responding to the underlying need for increased success planning and implementing projects, to the extent that the current wording has hindered the agencies ability to follow Northwest Forest Plan principles and achieve its goals. The goals of the Northwest Forest Plan cannot be achieved without project implementation.

Types of projects most likely affected by misinterpretation of the ACS include:

- Forest management outside reserves, including regeneration timber harvest and harvest within late-successional and old-growth habitats.
- Actions associated with timber harvest, including transportation system treatments such as culvert removal and replacement.
- Restoration silviculture in Riparian and Late-Successional Reserves, hazardous fuels reduction and forest health thinning, especially projects that are accomplished by a timber sale.
- Special uses, mining, livestock grazing and recreation.
- Watershed restoration projects, such as stream enhancements, fish passage improvements, and road decommissioning.²

Overlap between these types of projects is common. Timber sales are used to accomplish hazardous fuels reduction, restoration silviculture, and forest health thinning. Frequently, timber sales provide the opportunity and funding for culvert removal and replacement.

The current wording of the ACS has influenced litigation regarding the Endangered Species Act. The U.S. District Court in the Western District of Washington interpreted the Northwest Forest Plan as requiring that, “not only must the ACS objectives be met at the watershed scale...each project must also be consistent with ACS objectives, i.e. it must maintain the existing condition or move it within the range of natural variability.” Pacific Coast Federation of Fishermen’s Association v. National Marine Fisheries Service, 71 F. Supp.2d 1063, 1069 (W.D. Wash. 1999).³

In the PCFFA v. NMFS litigation, the U.S. District Court ruled that the Northwest Forest Plan programmatic biological opinion met the standards of the Endangered Species Act but that 24 project-level biological opinions did not adequately demonstrate that projects followed the ACS. The U.S. District Court ruled that NMFS had an independent obligation to ensure ACS consistency since it was used as a surrogate for jeopardy analysis⁴.

² Other examples of restoration projects include (but are not limited to) prescribed burning, underplanting, snag and down wood management, invasive weed control.

³ This case will hereby be referred to as PCFFA v. NMFS. This part of the ruling was affirmed in 253 F.. 3d 1137 (9th Circuit 2001). See Appendix A for full text of the ruling. NMFS is now known as National Oceanic and Atmospheric Administration (NOAA) Fisheries.

⁴ Jeopardy analysis refers to a determination that programs or projects will not jeopardize the continued existence of a species listed as threatened or endangered, or proposed for listing under the Endangered Species Act. Jeopardy analysis was at issue in PCFFA v. NMFS.

The U.S. District Court said that National Marine Fisheries Service (NMFS):

- failed to demonstrate that projects included in biological opinions were consistent with ACS objectives at all scales;
- inadequately addressed site-specific and aggregated effects of timber sales;
- inadequately addressed short-term adverse effects from timber sales;
- ignored the best available scientific information due to a failure to demonstrate the use of watershed analysis and its recommendations; and
- failed to show that actions proposed within Riparian Reserves would result in benefits to aquatic habitats and ecosystems as required by the Northwest Forest Plan.

The U.S. District Court in PCFFA v. NMFS allowed some watershed restoration projects to proceed, even though they were covered by a biological opinion invalidated by the court. Timber sales under the same biological opinions were not allowed to proceed, even though in many cases, the action that caused the adverse effect were restoration components attached to timber sale activities (such as a culvert replacement on a timber sale haul route). This has led to further agency confusion about application of the ACS at the site scale.

Northwest Forest Plan goals that would have been addressed by the timber Sales include: maintaining forest health, producing a sustainable supply of wood products, and restoring watershed health. The timber sales covered by the invalidated biological opinions minimized construction of roads and included associated projects such as decommissioning roads, and upgrading culverts. Trees were to be directionally felled away from the Riparian Reserves. Ground-based yarding and prescribed burning were to be timed to avoid harmful impacts.

As a result of the design features and mitigation measures, the timber sales were characterized as having minimal impact on anadromous fish habitat. The most common impact noted was a transitory increase in stream sedimentation and/or short-term, localized sedimentation from road-related activities, especially activities that would have been restorative in the long term but directly affected streams and riparian areas in the short-term, such as culvert replacement, road decommissioning, skid trail obliteration and road maintenance. The current wording of the ACS has been interpreted to preclude timber sales such as these that may result in minimal impact to aquatic and riparian habitat.

NOAA Fisheries has not issued any biological opinions covering timber sales in the Northwest Forest Plan area since 1999. Transportation system projects associated with the timber Sales have also been delayed.

The court decisions were related to biological opinions covering specific timber sales, but the underlying assumptions in the decisions could apply to any project. At least three pending lawsuits have been filed that allege that proposed projects do not follow the ACS because they do not maintain the existing riparian and aquatic condition at every scale; and thus violate requirements that projects comply with Resource Management Plans under the Federal Land and Policy Management Act (FLPMA) and the National Forest Management Act (NFMA).⁵

A difficulty presented by the court interpretations in the PCFFA litigation is that projects are expected to attain ACS objectives at all scales. However, the ACS objectives contain broad goals that are not intended to be achieved by individual projects. For example, the land allocations within the Northwest Forest Plan could be expected to meet the ACS objective to “maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of aquatic systems.” However, this same objective is impossible to achieve if applied as a standard to an individual project.

Purpose

The purpose of the proposed amendment is to clarify that:

- The proper scales for federal land managers to evaluate progress toward achievement of the ACS objectives are the fifth-field watershed and broader scales.⁶
- No single project should be expected to achieve all ACS objectives.

⁵ BARK, et al. v. Gary Larsen et al. U.S D.C. District Court of Oregon, Civil No. 02-904-HU, filed July 2002; Headwaters and ONRC Fund v. United States Forest Service; U.S D.C. District Court of Oregon, Civil No. 02-1519-JO, filed November 2002; and Klamath-Siskiyou Wildlands Center v. BLM U.S.D.C. District Court of Oregon, Civil No. 03-3006-CO, filed January 2003. League of Wilderness Defenders and Blue Mountains Biodiversity Project, and Cascadia Wildlands Project v. U.S. Forest Service, Civil No. 03-1357-PA (filed October 3, 2003)

⁶ The fifth-field scale was selected in the 1995 Federal Guide for Watershed Analysis as the consistent size for analysis. It is the first subdivision of a subbasin and considered the most appropriate to “provide the context for management through description and understanding of specific ecosystem conditions and capabilities” (p. 7) and “satisf[y] many needs and offers a consistent format for reporting results of an analysis” (p. 8).

- Decision-makers must design projects to follow the ACS. Project records must contain evidence that the project complies with relevant standards and guidelines in Sections C and D of Attachment A in the Northwest Forest Plan Record of Decision. Project records must also demonstrate how the decision-maker used relevant information from applicable watershed analysis to provide context for project planning.
- References to ACS objectives in the standards and guidelines in Sections C and D do not require that decision makers find that site-scale projects, in themselves, will fully attain ACS objectives.

Goals and objectives, management prescriptions and practices, land allocations and other management direction are contained within Attachment A. However, allocation-specific management direction that applies to project planning is also called “standards and guidelines.” These standards and guidelines are contained in Sections C and D of Attachment A. An amendment is needed to clarify that the standards and guidelines that must be specifically addressed in project planning records are those within Sections C and D of Attachment A, rather than the entirety of Attachment A.

Scope of The Decision

The Secretaries of Agriculture and the Interior are the decision-makers for this SEIS. They will decide whether or not to amend the ACS portions of all Resource Management Plans within the Northwest Forest Plan area. Management of the Coquille Forest would also be affected. The Secretaries are not reconsidering decisions made in 1994 regarding land allocations or fundamental management direction.

Individual projects would not be approved with this programmatic decision. The Secretaries will select No Action, the Proposed Action, or the Proposed Action as modified in Alternative A. The secretaries may also select a combination of these alternatives. A Supplemental EIS was prepared to address potential effects of the language changes because the agencies perceive that any change to the Northwest Forest Plan is controversial.

The decision will be based on which alternative increases success planning and implementing projects that follow Northwest Forest Plan principles and achieve its goals and has the least risk of changing the original intent of the ACS.

During scoping and the Draft SEIS comment period, many people suggested that the agencies should analyze certain concurrent proposals in a single EIS. Several commenters specifically mentioned that the Survey and Manage Supplemental EIS should be combined with the ACS Supplemental EIS.

The agencies are also concurrently considering alternatives to remove or modify the Survey and Manage mitigation measure in the Northwest Forest Plan to settle litigation filed by the timber industry and county government associations.

Other alleged connected analyses were also named, including the Forest Service "Invasive Plant EIS," the BLM and FS "Port-Orford-cedar EIS" and the BLM "Vegetation Treatments Programmatic EIS." The Port-Orford-cedar EIS was necessitated by the Kern v. BLM decision of the Ninth Circuit, and the BLM Vegetation Management EIS is intended (among other things) to address problems created by court injunctions from the 1980's that still restrict BLM herbicide use.

The agencies also considered the recent settlement agreement on a lawsuit pertaining to the federal timber sale program on Oregon and California (O&C) railroad lands. The major issues revolved around the alleged inappropriate application of reserves and wildlife viability standards to O&C lands. The O&C lands account for more than 2.5 million acres in western Oregon and northern California.

Under the O&C settlement agreement, federal agencies will attempt to achieve the PSQ associated with Alternative 9 (approximately 805 million board feet - see Chapter Three for more information on PSQ), along with additional harvest from restoration silviculture within the reserves. The BLM will revise its Resource Management Plans within the next several years. The revision process outlined in the settlement agreement will require further NEPA analysis. In the meantime, the BLM will continue to manage lands under its administration in accordance with existing Resource Management Plans.

NEPA regulations at 40 CFR 1508.25 (9)(a) discuss situations that warrant considering actions in a single environmental impact statement. None of the concurrent analyses, regulatory proposals, and settlements trigger action on the ACS SEIS, nor would a decision on the ACS trigger action on any of the other proposals. Each could proceed independently of the other. None are interdependent parts of a larger action.

The effects of the Northwest Forest Plan as a whole are analyzed in the 1994 FSEIS. None of the current proposals alter Northwest Forest Plan land allocations that are the basis for the effects analysis.

Therefore, the agencies determined that these various proposals are not connected or similar actions and therefore need not be combined in a single SEIS (40 CFR 1508.25). The cumulative effects of these actions are considered in Chapter 3&4.

Background: The Aquatic Conservation Strategy

The ACS was developed to restore and maintain ecological health of watersheds (and the aquatic ecosystems contained within them) on federally-managed lands within the Northwest Forest Plan area. The four major components of the ACS (Riparian Reserves, Key Watersheds, watershed analysis, and watershed restoration) provide the basis for protection of watershed health.

As stated in the Northwest Forest Plan Record of Decision:

“The Aquatic Conservation Strategy must strive to maintain and restore ecosystem health at watershed and landscape scales...This approach seeks to prevent further degradation and restore habitat over broad landscapes as opposed to individual projects or small watersheds.”

One of the authors of the ACS from the FEMAT team described the intent of the ACS as follows:⁷

“The ACS objectives provide a framework for managing aquatic ecosystems at the watershed and landscape (i.e. multiple watershed) scale. They describe the attributes and distribution of aquatic ecosystems believed necessary to provide conditions for maintaining currently strong populations of fish and other aquatic and riparian-dependent organisms and to recover currently degraded ecosystems. They are not intended to be a hard set of criteria that could or can be applied equally at all spatial scales of concern (i.e. site, watershed, province and region).”

In November 1999, the Regional Ecosystem Office (REO) published a memorandum addressing “Northwest Forest Plan Record of Decision requirements for determining project consistency with ACS objectives.” The REO clarified that “the watershed scale is the appropriate landscape context for determining whether actions are consistent with the ACS objectives.” The full text of the REO memorandum is included in Appendix A.

⁷ Declaration of Gordon Reeves Ph.D. filed in 1999 in PCFFA v. NMFS Civ. No. C 99-0067 T (U.S.D.C. W.D. Washington). Full text of the declaration is included in Appendix A.

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In December 2002, the United States Department of the Interior Office of Hearings and Appeals, Interior Board of Land Appeals (IBLA) upheld the BLM's interpretation of the ACS. The IBLA decision states:

“The Northwest Forest Plan does not require every action conducted in a watershed to result in improvement to the watershed,” and that “it may take decades, possibly more than a century” to achieve ACS objectives.

The IBLA concludes that timber sales that would not degrade a watershed are not precluded (even though they may have short-term, site-scale effects).

The Northwest Forest Plan includes existing language that supports the proposed language change (see Table 1). Gordon Reeves, PhD is a scientist who worked on the original Aquatic Conservation Strategy and has continued to work on ways to implement the strategy and monitor its results. In a 2003 review of the science behind the ACS, Dr. Reeves wrote:

“The Aquatic Conservation Strategy was designed to restore and maintain the processes that create and maintain conditions in aquatic ecosystems over time.”

Reeves also wrote that successful implementation of the ACS would require:

“...policies that recognize the dynamic nature of aquatic ecosystems and describe practices that allow the systems to express a range of desired conditions over time.”

Dr. Reeves noted that watersheds that support aquatic ecosystems display a range of conditions and not every reach of stream need be in good condition for the watershed to function properly. The full text of Dr. Reeves' report is in Appendix F.

Table 1. Northwest Forest Plan Excerpts

Citation	Excerpt	Interpretation
FEMAT page V-30; FSEIS page B-82.	“...To succeed, any Aquatic Conservation Strategy must strive to maintain and restore ecosystem health at watershed and landscape scales. Thus, this is the approach the conservation strategy here employs. The approach seeks to prevent further degradation and restore habitat over broad landscapes as opposed to individual projects or small watersheds...”	This excerpt indicates that the Aquatic Conservation Strategy has broad scale objectives. Individual projects must be considered in the context of the larger landscape.
FSEIS page 3&4-320	“...Projects can only proceed if watershed analysis and site-specific analysis and consultation find management activities consistent with...management direction. The consistency of these actions with specific prescriptions and long-term objectives of this proposal will either be affirmed by monitoring and research, or will be adapted to conform with the long-term objectives.”	This excerpt indicates that the Aquatic Conservation Strategy has long-term objectives.
FSEIS page B-83	“Implementing the ACS requires applying the standards and guidelines ...within the context of the overall ACS objectives.”	This excerpt differentiates between objectives and standards and guidelines. While all of Attachment A includes management direction, a subset of that direction is “standards and guidelines” that apply to project planning within various land allocations.

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Citation	Excerpt	Interpretation
FSEIS page B-83	“The standards and guidelines are designed to focus the review of proposed and existing projects to determine their compatibility with the ACS.”	This excerpt indicates that compliance with Key Watershed and Riparian Reserve standards and guidelines, given context provided by information at the watershed scale, ensures that projects are compatible with the ACS.
FSEIS page F-64	“The total system of Key Watersheds, along with Riparian Reserves and the specified standards and guidelines, will meet the need to protect the overall ecosystem while providing for other management opportunities.”	This excerpt indicates that compliance with Key Watershed and Riparian Reserve standards and guidelines, given context provided by information at the watershed scale, ensures that projects are compatible with the ACS.
Record of Decision page B-12; FSEIS page 3&4-68	“Standards and guidelines are intended to prohibit and/or regulate activities in Riparian Reserves that retard or prevent attainment of the Aquatic Conservation Strategy objectives.”	This excerpt indicates that compliance with Riparian Reserve standards and guidelines will ensure that attainment of ACS objectives is not retarded or prevented.
FSEIS Volume II, Appendix F. page F-166	“The Aquatic Conservation Strategy objectives do not meet the definition of standards and guidelines and thus, are not included.”	This excerpt differentiates between standards and guidelines and objectives.

Public Involvement

Scoping comments were solicited from the public, government agencies, and agency staffs through the following:

- Notice of Intent published in the Federal Register on November 25, 2002.
- Scoping letters sent to 2,800 concerned parties, including Indian tribes, through the Northwest Forest Plan mailing list between December 17, 2002 and January 14, 2003.
- On January 15, 2003, the scoping period was extended to February 3, 2003 to assure that all interested parties were provided adequate time to comment.

More than 400 letters, faxes, and e-mails (collectively referred to as scoping comments) were received from a wide variety of parties including environmental organizations, industry associations, local governments, individuals, and two Inter-tribal fish commissions. Scoping comments covered a wide array of interests. All scoping comments were reviewed by the IDT.

A Draft SEIS was released in March 2003. A comment period that exceeded 90 days was provided. The comment period ended July 10, 2003. Approximately 1,200 pieces of correspondence were received. A summary of substantive comments and agency responses is in Appendix C. The summary reflects the range of comments received. The public and other agencies raised the following issues during the scoping and Draft SEIS comment periods:

- **Changed Conditions** - Changed conditions since the release of the 1994 FSEIS should be considered in the effects analysis. Since 1994, there have been droughts, floods, and wildfires and subsequent salvage and restoration activities. Within the Northwest Forest Plan area since 1994, several species of fish have been listed under the Endangered Species Act and several water bodies have been listed as impaired under the Clean Water Act. Since 1994, agencies have been unable to meet the Probable Sale Quantity associated with Alternative 9.
- **Increased Accomplishment** - The proposed amendment is intended to increase agency success planning and accomplishment that follow Northwest Forest Plan principles, including timber harvesting. Timber harvesting and associated road work may have effects that are not consistent with attainment of ACS objectives.
- **Potential Unintended Consequences** - The proposed amendment may change the original intent of the ACS by eliminating particular passages. The analysis within this SEIS is related to these issues. Alternative A was developed to mitigate the risk of unintended consequences.

CHAPTER 2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

Introduction

This chapter describes and compares the alternatives considered in detail. It also discloses additional alternatives considered but eliminated from detailed study, and provides rationale for their dismissal.

Assumptions Common to All Alternatives

- All alternatives retain land allocation decisions from the Northwest Forest Plan.
- All components of the Aquatic Conservation Strategy are maintained, including Riparian Reserve standards and guidelines, watershed analysis, watershed restoration, and Key Watersheds. ACS objectives remain unchanged.
- NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) are developing new approaches to consultation that do not rely on the ACS as a surrogate for Endangered Species Act jeopardy analysis. The new approaches would be applied to consultation under all alternatives.

Alternatives Considered in Detail

Three alternatives - No Action, the Proposed Action, and Alternative A - are considered in detail in this Final Supplemental Environmental Impact Statement. These alternatives are variations on language within Attachment A of the Northwest Forest Plan Record of Decision.

No Action

Under the No Action alternative, the current wording of the ACS would be retained. Land managers would continue to plan projects to meet the goals and objectives of the Northwest Forest Plan, but would encounter difficulty demonstrating that projects resulting in short-term disturbance to aquatic or riparian habitat “maintain the existing condition.” A “finding of consistency with ACS objectives” would continue to be required for every project.

Proposed Action

Under the Proposed Action, the Secretaries of Agriculture and the Interior would amend specific language about how to follow the ACS within Resource Management Plans in the Northwest Forest Plan area. Land managers would be required to demonstrate that projects comply with applicable standards and guidelines in Sections C and D of Attachment A in the Record of Decision. Land managers would also be required to document how applicable watershed analysis was used to provide context for project planning. No additional site-scale determinations regarding attainment of ACS objectives would be required.

The Proposed Action does not change the goals or objectives of the 1994 Northwest Forest Plan Record of Decision. All components of the ACS (Riparian Reserves, Key Watersheds, watershed analysis and watershed restoration) would remain in place.

The Proposed Action also clarifies that information in watershed analysis will be used in planning and decision-making, but is not a decision-making process in and of itself. This principle is emphasized in 1994 Northwest Forest Plan Record of Decision, 1994 the FSEIS, and the 1995 *Federal Guide for Watershed Analysis*.

Alternative A – The Preferred Alternative

The Proposed Action was modified in response to comments received during the Draft SEIS comment period. The modified Proposed Action is called Alternative A. Alternative A is the Preferred Alternative.

Alternative A retains some paragraphs deleted by the Proposed Action and adds some explanatory paragraphs to the Proposed Action. These modifications are intended to resolve public concerns about specific wording in the Proposed Action, to more precisely reflect the intent of the ACS.

Public concern was expressed that under the Proposed Action a given project would not be required to “maintain the existing condition or improve the watershed condition.” Alternative A retains the concept that under the ACS, agencies must “maintain existing conditions or implement actions to restore conditions at the fifth-field watershed scale, over the long term.”

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Many people expressed concern about removing paragraphs that state that all of Attachment A should be considered “standards and guidelines.” Some people stated that the Proposed Action “rendered many Section C and D standards and guidelines unclear and ineffective.” Alternative A was developed to retain existing paragraphs that refer to all of Attachment A was standards and guidelines, to avoid unintended consequences of removing or replacing these references. Alternative A also retains the existing language that explains how to interpret standards and guidelines that refer to ACS objectives.

Specific language choices associated with No Action, Proposed Action, and Alternative A are compared in the following pages.

Northwest Forest Plan, Attachment A, Page A-6		
No Action (Existing)	Proposed Action	Alternative A
Designated areas, matrix and Key Watersheds all have specific management direction regarding how these lands are to be managed, including actions that are prohibited and descriptions of the conditions that should occur there. This management direction is known as “standards and guidelines” – the rules and limits governing actions, and the principles specifying the environmental conditions or levels to be achieved and maintained. Although the direction in all sections of this document constitutes standards and guidelines, standards and guidelines specific to particular land allocation categories, or relative to specific types of management activities, are included in Section C of these standards and guidelines.	Deleted in entirety	Same as No Action

Northwest Forest Plan, Attachment A, Page B-9		
No Action (Existing)	Proposed Action	Alternative A
Any species-specific strategy aimed at defining explicit standards for habitat elements would be insufficient for protecting even the targeted species. The Aquatic Conservation Strategy must strive to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian-dependent species and resources and restore currently degraded habitats. This approach seeks to prevent further degradation and restore habitat over broad landscapes as opposed to individual projects or small watersheds. Because it is based on natural disturbance processes, it may take decades, possibly more than a century, to accomplish all of its objectives. Some improvements in aquatic ecosystems, however, can be expected in 10 to 20 years.	Any species-specific strategy aimed at defining explicit standards for habitat elements would be insufficient for protecting even the targeted species. The Aquatic Conservation Strategy must strive to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian-dependent species and resources and restore currently degraded habitats. This approach seeks to prevent further degradation and restore habitat over broad landscapes as opposed to individual projects or small watersheds. Because it is based on natural disturbance processes, it may take decades, possibly more than a century, to accomplish all of its objectives. Some improvements in aquatic ecosystems, however, can be expected in 10 to 20 years. The baseline from which to assess maintaining or restoring the condition is developed through a watershed analysis. Improvement means restoring biological and physical processes within their ranges of natural variability.	Same as No Action

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Northwest Forest Plan, Attachment A, Page B-10		
No Action (Existing)	Proposed Action	Alternative A (see footnotes on following page)
<p>The standards and guidelines are designed to focus the review of proposed and certain existing projects to determine compatibility with the Aquatic Conservation Strategy objectives. The standards and guidelines focus on “meeting” and “not preventing attainment” of Aquatic Conservation Strategy objectives. The intent is to ensure that a decision maker must find that the proposed management activity is consistent with the Aquatic Conservation Strategy objectives. The decision maker will use the results of watershed analysis to support the finding. In order to make the finding that a project or management action “meets” or “does not prevent attainment of” the Aquatic Conservation Strategy objectives, the analysis must include a description of the existing condition, a description of the range of natural variability of the important physical and biological components of a given watershed, and how the proposed project or management action maintains the existing condition or moves it within the range of natural variability. Management actions that do not maintain the existing condition or lead to improved conditions in the long term would not “meet” the intent of the Aquatic Conservation Strategy and thus, should not be implemented.</p>	<p>The four components of the Aquatic Conservation Strategy (Riparian Reserves, Key Watersheds, watershed analysis, and watershed restoration), in combination with application of pertinent standards and guidelines, are expected to maintain and restore ecosystem health at watershed and broader scales.</p> <p>By itself, no site-scale project can, or should be expected to fully achieve ACS objectives. These objectives are intended to be met over time at watershed and broader scales. Monitoring results will help managers evaluate progress toward achievement of ACS objectives.</p> <p>To follow the ACS at the site-scale, decision makers must demonstrate that projects comply with standards and guidelines in Sections C and D.</p> <p>The project record will demonstrate how the agency used relevant information from applicable watershed analysis to provide context for the design and site-specific assessment of the project, recognizing that watershed analysis is not a decision-making process in and of itself.</p> <p>References to ACS objectives in the standards and guidelines in Sections C and D do not require that decision makers find that site-scale projects, in themselves, will fully attain ACS objectives.</p>	<p>The four components of the Aquatic Conservation Strategy (Riparian Reserves, Key Watersheds, watershed analysis, and watershed restoration), in combination with application of relevant standards and guidelines in Sections C and D (and other relevant standards in Resource Management Plans) are intended to achieve Aquatic Conservation Strategy Objectives.¹</p> <p>Under the Aquatic Conservation Strategy, the agencies must maintain existing conditions or implement actions to restore conditions at the fifth-field watershed scale over the long term. No management activities can be expected to maintain the existing condition at all scales and all times; disturbance from management activities must be considered in the context of the condition of the fifth-field watershed as a whole.²</p> <p>The project record will demonstrate how the agency used relevant information from applicable watershed analysis to provide context for project planning, recognizing that watershed analysis is not a decision-making process in and of itself, nor is watershed analysis a decision document. If watershed analysis is not required or available, or does not contain relevant information, the project record will provide evidence that project effects were considered relative to the watershed condition. Projects should be designed to comply with applicable standards and guidelines in Sections C and D (and other applicable standards in Resource Management Plans). No further finding of ACS consistency is required.</p> <p>To comply with Riparian Reserve Standards and Guidelines that reference ACS objectives, the decision maker must document that analysis has been completed, including a description of the existing condition, a description of the range of natural variability of the important physical and biological components of a given fifth-field watershed, and how the project or management action maintains the existing condition or restores it toward that range of natural variability.³</p>

Footnotes from Alternative A, page B-10:

¹ Federal agencies may not be able to attain objectives within watersheds with relatively low proportions of Federal lands (see Northwest Forest Plan FSEIS p. 3&4-82).

² The Federal Guide for Watershed Analysis (1995) discusses issues of scale and explains why the fifth- field watershed scale “satisfies many needs and offers a consistent format for reporting results of an analysis.” The Federal Guide states that analysis at the watershed scale “provides the context for management through the description and understanding of specific ecosystem conditions and capabilities.” Watershed analysis requirements are described later in Section B.

³ The Federal Guide for Watershed Analysis (1995) discusses Range of Natural Variability on p. 20.

Northwest Forest Plan, Attachment A, Page C-1		
No Action (Existing)	Proposed Action	Alternative A
<p>Although the direction in all sections of this document constitutes standards and guidelines, standards and guidelines specific to particular land allocation categories, or relative to specific types of management activities, are included (or referenced) in this section, Section C, of these standards and guidelines.</p> <p>All land allocations have specific management direction regarding how those lands are to be managed, including actions that are prohibited and descriptions of the conditions that should occur there. This management direction for specific lands is known as “standards and guidelines” — the rules and limits governing actions, and the principles specifying the environmental conditions or levels to be achieved and maintained.</p>	<p>Paragraph deleted</p> <p>All land allocations have specific management direction regarding how those lands are to be managed, including actions that are prohibited and descriptions of the conditions that should occur there. This management direction for specific lands is known as “standards and guidelines” — the rules and limits governing actions, and the principles specifying the environmental conditions or levels to be achieved and maintained.</p>	<p>Same as No Action</p>

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Northwest Forest Plan, Attachment A, Page C-2		
No Action (Existing)	Proposed Action	Alternative A
Related approved plans such as those for National Scenic Areas or Wild and Scenic rivers are similarly assumed to apply where they are more restrictive, or provide greater benefits for late-successional forest related species.	<p>Related approved plans such as those for National Scenic Areas or Wild and Scenic rivers are similarly assumed to apply where they are more restrictive, or provide greater benefits for late-successional forest related species.</p> <p>Some standards and guidelines refer to attaining, being consistent with, meeting, or achieving ACS objectives. The intent of these references is that projects will use relevant information from applicable watershed analysis to provide context for project planning. These references do not mean that decision makers must find that a site-scale project, by itself, will fully attain ACS objectives.</p>	Related approved plans such as those for National Scenic Areas or Wild and Scenic rivers are similarly assumed to apply where they are more restrictive, or provide greater benefits for late-successional forest related species.

Northwest Forest Plan, Attachment A, Page C-31		
No Action	Proposed Action	Alternative A
As a general rule, standards and guidelines for Riparian Reserves prohibit or regulate activities in Riparian Reserves that retard or prevent attainment of the Aquatic Conservation Strategy objectives. Watershed analysis and appropriate NEPA compliance is required to change Riparian Reserve boundaries in all watersheds.	As a general rule, standards and guidelines for Riparian Reserves prohibit or regulate activities in Riparian Reserves that retard or prevent attainment of the Aquatic Conservation Strategy objectives. Watershed analysis and appropriate NEPA compliance is required to change Riparian Reserve boundaries in all watersheds.	<p>As a general rule, standards and guidelines for Riparian Reserves prohibit or regulate activities in Riparian Reserves that retard or prevent attainment of the Aquatic Conservation Strategy objectives at the fifth-field watershed scale, over the long term. Watershed analysis and appropriate NEPA compliance is required to change Riparian Reserve boundaries in all watersheds.</p> <p>To comply with Riparian Reserve standards and guidelines that reference ACS objectives, the decision maker must complete an analysis that includes a description of the existing condition, a description of the range of natural variability of the important physical and biological components of a given fifth-field watershed, and how the project or management action maintains the existing condition or restores it toward that range of natural variability.</p>

Alternatives Considered but Eliminated from Detailed Study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives to the Proposed Action and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). The range of alternatives considered in detail is limited by the requirement to fulfill the Purpose and Need.

Several alternatives considered by the interdisciplinary team were eliminated from detailed study. The Purpose and Need substantially limits the range of reasonable alternatives available for analysis and provides a relatively narrow scope for this action.

No Cutting or Removal of Trees Older Than 80 Years

The Oregon Natural Resources Council and several other groups and individuals suggested an alternative that would not allow cutting or removal of trees aged 80 years or older. With a few exceptions, all land allocations and standards and guidelines of the Northwest Forest Plan would remain in effect. Fuel reduction activities in fire-dependent forests may be allowed when the primary objective is ecological restoration. Pre-disturbance surveys would not be required for restoration projects in stands less than 80 years old. Pre-disturbance surveys would still be required for fuel reduction projects that substantially modify stands more than 80 years old. Pre-disturbance surveys would be conducted for Survey and Manage and Protection Buffer species listed in the 1994 Northwest Forest Plan Record of Decision. Strategic surveys would continue.

This alternative was eliminated from detailed study because it does not respond to the Purpose and Need for Action. It does not suggest an alternative way to clarify language in the ACS, nor does it respond to the underlying need to follow Northwest Forest Plan principles.

This SEIS is not intended, nor required, to re-examine management direction within the Northwest Forest Plan. An alternative that considered limiting harvest to stands younger than 80 years was analyzed, but not selected, in 1994.

Additional Standards and Guidelines and/or Mitigation Measures

Three specific alternatives were suggested to increase protection of aquatic ecosystems.

- 1) An alternative was suggested to suspend existing “logging plans” and not permit any future plans until the “long-term consequences can be comprehensively approached, especially within sensitive places such as old-growth, areas that have not recovered from damage caused by past logging, and anywhere slopes are steep or unstable. “
- 2) An alternative was suggested that would have eliminated regeneration harvesting from consideration within the Northwest Forest Plan area.
- 3) An alternative was suggested to strictly prohibit activities that could disturb aquatic or riparian ecosystems at any scale. Riparian Reserve standards and guidelines would apply to all projects, regardless of land allocation.

The range of alternatives in the 1994 Northwest Forest Plan FSEIS considered measures such as the three suggested here. For instance, the FSEIS considered eliminating programmed timber harvest in late-successional and old-growth stands, and eliminating road building in Key Watersheds.

The Secretaries of Agriculture and the Interior selected Alternative 9 in their 1994 decision. The current Secretaries intend to increase agency success implementing that plan. Alternatives that added standards and guidelines were eliminated from detailed study because they would not meet the Purpose and Need for Action as described in Chapter 1. They would not result in increased success implementing projects (including timber sales) that follow Northwest Forest Plan principles. These alternatives would not address the need to clarify the current wording of the ACS to remove expectations that are impossible for projects to meet.

Exempt Ski Resorts from Riparian Reserve Standards and Guidelines

The agencies also considered an alternative to exempt ski resorts from the Riparian Reserve standards and guidelines. Ski area representatives have asserted that Riparian Reserve standards and guidelines have restricted ski run development and reduced the potential for additional recreational opportunities. An array of Best Management Practices specific to the ski industry was suggested to meet the same needs as the Riparian Reserve standards and guidelines but allow greater flexibility.

During the Draft SEIS comment period, ski industry representatives stated that:

“The Crystal Mountain Master Development Plan Draft Environmental Impact Statement document (August 2000) contains many examples of how Riparian Reserves have restricted ski trail development.”

“Confusion resulting from misinterpretation of the ACS objectives has contributed to a three-year setback for the Mt. Ashland project, likely doubled the expense associated with the NEPA process, and has contributed to the complete redrafting of the Mt. Ashland Ski Area Expansion Environmental Impact Statement. “

“In the late 1980s, operators of the Stevens Pass ski facility developed ski runs in the Mill Valley portion of the Stevens Pass special use permit (SUP) area. It is worth noting that trail development accomplished in the late 1980s would not have been allowed given the current, prevailing interpretation of the ACS (in fact, much of Region 6's ski trail infrastructure would not have been possible with the prevailing ACS interpretation.)”

The ski industry representatives further described their suggestion for a “fundamental re-design” of how the Riparian Reserve standards and guidelines apply to permitted ski resorts. The representatives suggested a “matrix of modified standards and guidelines and ‘best management practices’ for special use permit lands.” The representatives asserted that a significant degree of protection for riparian areas would be achieved with such a matrix.

The alternative to exempt ski industry operations from the Aquatic Conservation Strategy standards and guidelines and replace them with another set of standards was eliminated from detailed study because it would not respond to the Purpose and Need. The scope of this SEIS is strictly limited to clarify ACS intent; this alternative would deviate from the intent to apply the standards and guidelines to activities within Riparian Reserves on federal lands within the Northwest Forest Plan area.

Streamline Procedures for Planning Restoration Activities

This alternative would streamline procedures for planning and implementing restoration activities, while leaving the existing language intact for logging, mining, and other extractive activities. Language would be drafted to allow short-term disturbance to aquatic or riparian habitat for watershed restoration projects. Short-term disturbance to aquatic or riparian habitat would not be allowed for projects that are not clearly restorative.

This alternative was eliminated from detailed study because it does not address the underlying need for action, which is to follow Northwest Forest Plan principles and achieve its goals. Alternative 9 was selected within the Northwest Forest Plan partly because it provided higher amounts of timber than some other alternatives. This alternative would put impossible expectations on logging (and other “non-restoration”) projects because “short-term disturbance would not be allowed.”

This alternative would also leave unclear how to treat watershed restoration projects associated with a timber sale (such as culvert upgrades along a timber sale haul route). Streamlined procedures already exist for routine projects that may be categorically excluded from documentation in an Environmental Assessment or EIS under NEPA.

Separate Watershed Restoration from Timber Sales

Some comment letters to the Draft SEIS suggested that watershed restoration components should not be funded or accomplished with timber sales. Restoration work is often funded or accomplished with timber sales. This is efficient and allows opportunities to meet a variety of needs with an integrated project. Timber sales can fund road work, reduce fuel hazard, and improve forest health. Separating these projects in planning and/or implementation phases would be impractical.

This alternative was eliminated from detailed study because agency funding and contracting procedures are beyond the scope of this analysis. It would not address the need to clarify language in the ACS. See Appendix C for detailed discussion about the integration of vegetation management and restoration.

Change Watershed Analyses to Watershed Plans

This alternative would modify the ACS by changing the role of watershed analysis. Watershed analysis would become a decision-making process and would contain prescriptive steps and priorities for restoring watersheds. Watershed plans would be similar to Resource Management Plans, except they would be applicable to a smaller geographic area. Projects would be required to be designed consistent with these watershed plans.

This alternative was eliminated from detailed study because it does not respond to the Purpose and Need. It would deviate from the stated role of watershed analysis in the 1994 Northwest Forest Plan and the 1995 Federal Guide for Watershed Analysis. It would not clarify project documentation requirements.

Incorporate Watershed Analysis into Environmental Documentation

An alternative was suggested during the Draft SEIS comment period to add a guideline that directs decision-makers to incorporate watershed analysis into environmental documentation by reference. The concern is that watershed analysis results have not been adequately incorporated into NEPA documentation.

This concern is addressed through clarification of the information needed in project records document how projects are designed to follow the ACS. Alternative A specifically states: “The project record will demonstrate how the agency used relevant information from applicable watershed analysis to provide context for project planning...” and “To comply with Riparian Reserve standards and guidelines that reference ACS objectives, the decision maker must document that analysis has been completed, including a description of the existing condition, a description of the range of natural variability of the important physical and biological components of a given fifth-field watershed, and how the project or management action maintains the existing condition or restores it toward that range of natural variability.”

This alternative was eliminated from detailed study because it would not clarify documentation requirements and its essential elements are already included in an alternative under detailed consideration.

Required Procedures for Cumulative Watershed Impact Analysis

This alternative would add language to the ACS with specific requirements to use an equivalent roaded area (ERA) calculation for conducting cumulative watershed impact analysis. ERA analysis would be limited to watersheds of 5,000 - 15,000 acres. Projects with a low potential to affect water quality would be exempt from using the ERA calculation.

This alternative was eliminated from detailed study because it does not address the Purpose and Need to clarify language in the ACS. It would create an additional standard, which is not within the scope of this analysis.

Creating standards and guidelines specifying use of a single model could unnecessarily constrain interdisciplinary teams or require analysis that is not useful or relevant. NEPA requires that environmental analyses use the best available information. Specifying a particular model in the standards and guidelines would force analysts to use the model even if better methods are available or lead to endless amendments as models are updated and refined. Also, agency direction on how and when to complete cumulative effects analysis is already available.

Add a 10-year Time Frame for Achieving ACS objectives

Some groups suggested that a 10-year time frame for achievement of ACS objectives should be added to standards and guidelines that refer to ACS objectives. This alternative was considered, but eliminated from detailed study because it would conflict with language on page B-9 of the Northwest Forest Plan Record of Decision that states:

“...it may take decades, possibly more than a century, to accomplish all of [the ACS] objectives. Some improvements in aquatic ecosystems, however, can be expected in 10 to 20 years.”

Requiring projects to achieve ACS objectives in a 10-year time frame could establish an unreasonable standard. For instance, restoration of some components of old-growth forest habitats is likely to take more than a decade to accomplish.

Proposed Action Language Circulated for Scoping

The original language described in the Notice of Intent and circulated for scoping was eliminated from detailed study because new language better responds to the Purpose and Need, based on internal and public comment. The language circulated for scoping was intended to meet the same needs, but was found to lack some important elements. These were included in the Proposed Action analyzed in the draft SEIS, specifically, the importance of analysis at the watershed and broader scales to provide context.

Other Wording Suggestions

Two specific language additions were suggested that would add the following standards and guidelines to the Record of Decision:

Option 1: “Watershed analysis must include a description of the existing condition, a description of the range of natural variability of the important physical and biological components of a given watershed. Once a watershed analysis is completed for a watershed, the project record for each project proposed in that watershed will demonstrate how the management activity is consistent with each of the Aquatic Conservation Strategy objectives, including a finding that the proposed project or management action maintains the existing condition or moves it within the range of natural variability.”

Option 2: “While some objectives can only be fully achieved at a watershed or landscape scale, each project must be analyzed for its consistency with each Aquatic Conservation Strategy objective, and must be found to be consistent with the standard specified in the Standard and Guideline (for example, must “attain” or “not retard or prevent attainment.”) The analysis must culminate in a synthesized conclusion of overall ACS consistency that considers all of the ACS objectives relevant to a given action. The intent (of the ACS) is to ensure that a decision maker must find that the proposed management activity is consistent with the Aquatic Conservation Strategy objectives. While some objectives can only be fully achieved at a watershed or landscape scale, each project, including projects or portions of projects not located within Riparian Reserves or Key Watersheds, must be found to be consistent with the ACS objectives. Projects that would retard or prevent attainment of these objectives would not comply with the ACS. The analysis must culminate in a synthesized conclusion of overall ACS consistency that considers all of the ACS objectives relevant to a given action.”

Both of these alternatives were eliminated from detailed study because they are very similar to the No Action alternative.

Slight Changes to the Proposed Action

The following alternative was suggested to replace a portion of B-10:

“The four components of Aquatic Conservation Strategy (Riparian Reserves, Key Watersheds, watershed analysis and watershed restoration), in combination with application of pertinent standards and guidelines, are expected to maintain and restore ecosystem health in the long-term at the watershed and broader scales. No site-scale project can, or should be expected to achieve ACS objectives. To follow the ACS at the site-scale, decision makers must only demonstrate that projects comply with standards and guidelines in sections C and D. References to ACS objectives in the standards and guidelines in Sections C and D do not require that decision makers find that site-scale projects will attain ACS objectives. Some standards and guidelines refer to attaining, being consistent with meeting, or achieving ACS objectives. The intent of these references is that projects will use relevant information from applicable watershed analysis to provide context for project planning. These references do not mean that decision makers must find that a site-scale project will necessarily attain, be consistent with, or meet ACS objectives.”

This alternative was not considered for detailed study because it is very similar to the Proposed Action.

Amend Riparian Reserves Standards and Guidelines

An alternative was considered to rewrite the Riparian Reserve standards and guidelines to clarify how land managers are to demonstrate that projects comply with them. The road management (RF-2) standards and guidelines (p. C-32) provide a model for how this alternative would be developed. These guidelines state: “For each existing or planned road, meet Aquatic Conservation Strategy objectives by:...” This alternative would apply that format to other standards and guidelines that refer to ACS objectives.

The agencies did not develop this alternative for detailed study because of the risk of deviation from the intent of the ACS inherent in a more extensive re-write. The need for action is limited to increased success planning and implementing projects that follow existing Northwest Forest Plan principles. Amending the Riparian Reserve standards and guidelines would go beyond the scope of meeting this need.

Eliminated References To The Management Direction In Attachment A As “Standards And Guidelines”

The Northwest Forest Plan uses the term “standards and guidelines” in two different ways. One usage refers to specific guidance for each of the land allocations. The other usage refers to all management direction included in Attachment A to the ROD, including objectives, land allocations, and the ecological basis for the standards and guidelines.

An alternative was considered to eliminate references to the management direction in attachment A as “standards and guidelines” everywhere except within specific portions of Sections C and D. The Proposed Action eliminates some, but not all of these references.

The agencies did not develop this alternative for detailed study because public comments to the Draft SEIS indicated a lack of public support for this approach. Many members of the public expressed that eliminating references to standards and guidelines as all of Attachment A would render the management direction in all sections but C and D unenforceable. Alternative A was developed to retain the existing references.

Alternatives Compared

Table 2. Alternatives Compared by Decision Factors and Issues

Decision Factor/ Issue	No Action	Proposed Action	Alternative A
Purpose and Need for Action Met	No, ambiguous language remains, agencies experience difficulty demonstrating how projects follow the ACS	Yes, ACS documentation requirements are clarified, success implementing projects is increased	Same as Proposed Action
Environmental Consequences	More similar to Alternative 1 than Alternative 9 in Northwest Forest Plan FSEIS	More similar to Alternative 9 in the Northwest Forest Plan FSEIS	Same as Proposed Action
Changed Conditions	No changed conditions that affect 1994 FSEIS findings	Same as No Action	Same as No Action
Scale of Evaluation of ACS Objectives	Ambiguous direction	Fifth- field watershed	Fifth- field watershed
Use of the Term Standards and Guidelines	Applies to all of Attachment A	Applies solely to Sections C and D	Same as No Action
Role of ACS objectives	Have been interpreted as “hard set of criteria” that apply to project planning	Clarifies that projects, in themselves cannot be expected to achieve ACS objectives	Same as Proposed Action; retains language that projects should be designed to “maintain and restore” aquatic ecosystem health
Risk of Changing the Original Intent of the ACS	Greatest risk	More risk	Less risk

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CHAPTER 3&4. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Introduction

Chapter 3&4 presents the analytical basis for the comparison of alternatives presented in Chapter 2. “Chapter 3&4” is so titled because it combines the Affected Environment and Environmental Consequences sections required by the National Environmental Policy Act. These chapters were combined in the FSEIS for the Northwest Forest Plan.

Supplemental EISs are discussed at 40 CFR 1502.9 (c) “Agencies shall prepare supplements...if...the agency makes substantial changes in the Proposed Action that are relevant to environmental concerns.” This Supplemental EIS considers whether the Proposed Action or Alternative A will change the environmental components described in the 1994 Northwest Forest Plan FSEIS. The effects findings are considered in light of new information or events that have occurred since 1994. Appendix B provides a detailed review of the findings in Chapter 3&4 of the 1994 FSEIS.

Affected Environment

The Affected Environment section considers the events and actions that have occurred since 1994 that may be relevant to effects of the alternatives.

First, the four components of the ACS are considered. Next, the timber sale program is discussed. Weather and natural disturbance events that have occurred since 1994 are considered. New listings under the Endangered Species Act and the Clean Water Act are also discussed. Monitoring accomplishments since 1994 are reviewed. Timber harvest on private land is considered. The Secure Rural Schools and Community Self-Determination Act of 2000 was also considered as a changed condition. Other aspects of the affected environment as described in 1994 are incorporated by reference and briefly described in Appendix B.

The Four Components of the Aquatic Conservation Strategy

This section of the Final SEIS considers the four components of the Aquatic Conservation Strategy and agency actions since 1994 relative to these components. The following discussions and tables about the four components of the ACS are excerpted from the Biological Assessment in Appendix D.

Riparian Reserves

Interim Riparian Reserve widths (as described in the Northwest Forest Plan) were designed to provide a high level of fish and riparian protection until watershed and site-specific analysis could be completed. Limited adjustment of the interim Riparian Reserve widths has occurred over the past ten years. Acreage has increased in the Riparian Reserves since 1994 due to updated information on the extent of this allocation.

Standards and guidelines have been established for Riparian Reserves, Key Watersheds, Designated Areas and Matrix, Late-Successional Reserves, Adaptive Management Areas, Managed Late-Successional Areas, and Administratively Withdrawn Areas. While not all of the standards and guidelines are aimed at protecting riparian-dependent resources, some of those that largely target conservation of terrestrial habitat will indirectly benefit riparian-dependent resources. For example, in Late-Successional Reserves, no harvest is allowed in stands over 80 years old west of the Cascades (110 years in the Northern Coast Range Adaptive Management Area) (USDA and USDI 1994b at p. C-12) and road construction is not recommended unless potential benefits exceed the costs of habitat impairment (Northwest Forest Plan Record of Decision at p. C-16). This will result in fewer ground-disturbing activities and their potential effects on aquatic and riparian habitat. The agencies have complied with standards and guidelines as demonstrated by implementation monitoring results between 1996-2001. Detailed information about monitoring results is in the Biological Assessment in Appendix D.

Key Watersheds

The Northwest Forest Plan established Key Watersheds to provide high water quality and refugia for at-risk fish species. Standards and guidelines specific to Key Watersheds are summarized on page C-7 of the Record of Decision. Key Watersheds have the highest priority for watershed restoration and require Watershed Analysis before activities may occur.

Road decommissioning is a priority in Key Watersheds. Implementation monitoring reports for the years 1999, 2000, and 2001 evaluated the status of road mileage in Key Watersheds. The trend has been a reduction in total road miles in Key Watersheds.

Of seven Key Watersheds reviewed for the 1999 report, six had avoided road construction, six had reduced road mileage, and one had maintained road mileage. Of approximately 1,861 system road miles existing in 1994, 84 miles had been decommissioned and 13.3 new miles had been constructed, a net reduction of 70.7 miles, at a ratio of 6.3 to 1. For non-system roads, 11.9 miles had been decommissioned while 10.9 miles had been constructed, for a net reduction of 1.0 mile (Regional Implementation Monitoring Team 1999).

There was a net reduction of 82.2 miles (4%) of system roads in 12 Key Watersheds reported in the 2000 implementation monitoring report (Regional Implementation Monitoring Team 2000). The ratio of miles of road decommissioned to miles of road constructed was 9.6 to 1 (91.8 miles to 9.6 miles). Information was not available for status of non-system roads in six of the Key Watersheds. A net reduction of 11.3 miles (5.9%) occurred in the other six Key Watersheds. The ratio of miles decommissioned to miles of road constructed was 2 to 1 (23 miles to 11.7 miles).

System road mileages were reduced by 195.4 miles (11%) in 12 Key Watersheds evaluated for the 2001 implementation monitoring report (Regional Implementation Monitoring Team 2001). The ratio of miles of road decommissioned to miles of road constructed was 90 to 1 (197.7 miles to 2.2 miles). The 2001 implementation monitoring effort did not report on non-system road mileage status for the Key Watersheds.

The status of road mileage in the 31 Key Watersheds evaluated by the Regional Implementation Monitoring Team is likely representative of Key Watersheds throughout the Northwest Forest Plan area. There has been an aggressive effort to reduce road mileage by road decommissioning, while new road construction has been extremely limited.

Road decommissioning has had positive benefits to the aquatic health of the Key Watersheds. The potential for catastrophic introduction of sediment if a culvert becomes plugged and the road prism fails is reduced. The concentration of flows by road segments augmenting the stream network is reduced. Chronic sediment delivery from native surface roads, fill slopes, and cut slopes has also been reduced.

Watershed Analysis

Watershed Analysis has been completed by the administrative units for the majority of Key Watersheds in the Northwest Forest Plan area. Watershed analyses have been completed for all of the Key Watersheds on 19 administrative units (see Table 4). Six administrative units have completed watershed analyses for most (67-91 percent) of their Key Watershed areas. Small federal land ownership, lack of cooperators, and/or lack of project activity made these key watersheds a low priority for Watershed Analysis.

Watershed analyses have been completed for the vast majority of the inventoried roadless areas in the Northwest Forest Plan area. Inventoried roadless areas occur only on National Forest lands in the Northwest Forest Plan area. Watershed analyses have been completed for 100% of the inventoried roadless areas in non-Key Watersheds on 10 administrative units. Eight administrative units have not completed watershed analyses for inventoried roadless areas in non-Key Watersheds.

Like Key Watersheds, Watershed Analysis is a low priority for many inventoried roadless areas in non-Key Watersheds due to small federal land ownership, lack of cooperators, land allocation designation, and/or lack of planned project activity. Data was not collected for the Modoc and Lassen National Forests.

Watershed Restoration

Watershed restoration results were reviewed for the years 1994 – 2001. Table 5 describes these achievements. The Klamath, Mendocino, Six Rivers, Shasta-Trinity National Forest and the Arcata, Redding and Ukiah BLM District accomplishments between 1994 and 2001. The other units display information only since 1998 (1994-1998 accomplishments are available in previously published documents). The values for Arcata administrative unit include the King Range National Conservation Area.

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Table 3. Watershed Analysis Accomplishments

Administrative Unit	Federal Land Area with Completed Watershed Analyses (%)	Key Watershed Area with Completed Watershed Analyses (%)
Columbia River Gorge National Scenic Area	83.3	Not Applicable
Deschutes	82.9	100
Gifford Pinchot	99.1	100
Klamath	71	86
Lassen	No Data	No Data
Mendocino	93.1	100
Modoc	No Data	No Data
Mount Baker Snoqualmie	66.2	71
Mount Hood	100	100
Okanogan	100	100
Olympic	80.4	91
Rogue River	100	100
Six Rivers	80.7	85
Siskiyou	99.9	100
Shasta-Trinity	56.4	100
Siuslaw	98	100
Umpqua	98.5	82
Wenatchee	100	100
Willamette	100	100
Winema	55.7	100
Arcata	33.5	67
Coos Bay	93.1	100
Eugene	96.1	100
Klamath Falls	100	100
Medford	93	100
Redding	43.6	100
Roseburg	100	100
Salem	97.1	100
Ukiah	37	Not Applicable

Source: Biological Assessment (Appendix D)

Table 4. Aquatic Restoration Accomplishments 1998-2001.

Administrative Unit	Instream Structures (mi.)	Instream Passage (mi.)	Riparian (ac.)	Riparian (mi.)	Upland (ac.)	Road Decom. (ni)	Road Improved (mi.)	Wetland Fresh (ac.)
Columbia River Gorge NSA	3	0	375	0	0	6	3	137
Deschutes	26.3	0.7	513	30.5	529	104.3	15.4	207
Gifford Pinchot	178.3	1.1	1508	21.7	11	285.8	193.3	0
Klamath	325	ND	ND	ND	2907	136.2	ND	ND
Lassen	ND	ND	ND	ND	ND	ND	ND	ND
Mendocino	67	ND	ND	ND	567	62	ND	ND
Modoc	ND	ND	ND	ND	ND	ND	ND	ND
Mount Baker Snoqualmie	8.4	0.5	13	0	1	54.4	137.6	0
Mount Hood	50.3	24.1	176	13.3	309	42.4	16.1	4
Okanogan	0.6	0.2	15	1.3	47	24.2	19.2	0
Olympic	0.8	4.3	82	9.9	368	46.7	33.9	0
Rogue River	44.5	55	628	0	99	26.5	12.9	1
Six Rivers	120	ND	ND	ND	711	137	ND	ND
Siskiyou	62.8	39	2833	0	0	57.7	0	0
Shasta-Trinity	244	ND	ND	ND	1980	112.4	ND	ND
Siuslaw	40.2	0	70	1.9	0	34.4	10.6	0
Umpqua	12.3	3	11	2.3	4099	85.6	110	0
Wenatchee	8.3	27	337	63.6	4	91.9	92.2	18
Willamette	18	0	613	38.7	1784	43.4	65.1	7
Winema	0.3	0	0	0	1	150.1	0.2	0
Arcata	ND	ND	ND	ND	ND	33.5	ND	ND
Coos Bay	12.2	25.1	1533	0.3	0	28.8	2.1	0
Eugene	7.7	8.2	11	3.1	0	5.3	0.9	0

ND = No Data

Source: Biological Assessment (Appendix D)

The Timber Sale Program

The proposed amendment has the potential to affect agency success implementing the timber sale program. An indicator of success in implementing this program is the likelihood of the agencies to offer timber toward meeting the “Probable Sale Quantity.” The Northwest Forest Plan established the term Probable Sale Quantity (PSQ) for estimates of average annual timber sale levels likely to be achieved. The Northwest Forest Plan used the term PSQ to acknowledge inherent uncertainties in the estimates (Johnson et al. 1993). The Northwest Forest Plan FSEIS (Chapter 3&4, p. 267) addressed the potential for the PSQ to change as National Forest and BLM District plans were completed or revised:

“Sustainable sale estimates will be made using more refined data and procedures available when Draft Forest and District Plans are completed or current plans are revised.”

The Northwest Forest Plan FSEIS (Chapter 3&4, pp. 266 and 268) estimated the PSQ at 958 million board feet (MMBF), plus an additional 10 percent volume estimated in “other wood” (cull, sub-merchantable, firewood, and other products) for a total of 1.1 billion board feet.

By 1998, PSQ across the Northwest Forest Plan area was reduced by 15 percent, to 805 MMBF. Revised Riparian Reserve acreage estimates at the local administrative unit level were the single largest factor for the reductions in PSQ.

The Northwest Forest Plan assumed that 90 percent of the early decades PSQ would come from late-successional and old-growth forest, much of it through regeneration harvest. Individual Resource Management Plans outline assumptions for the amount and timing of silvicultural prescriptions such as thinning, partial cutting, and regeneration harvesting. The planning assumptions are based on the type of forests and the mix of older and younger forests available for harvest within each administrative unit.

Achievement of current PSQs for the individual administrative units, and for the Northwest Forest Plan area as a whole, are contingent on the ability to implement the range of silvicultural prescriptions outlined in individual Resource Management Plans. The agencies have not been able to implement the range of projects across the Northwest Forest Plan area partly because of the court interpretations in the PCFFA v NMFS litigation.

The agencies' annual timber sale offerings are shown in Figure 2. Between 1999 and 2002, the agencies offerings ranged from 148 to 400 million board feet per year. The reduction in sale offerings are the result of appeals and protests on individual projects, enjoined biological opinions in PCFFA v. NMFS litigation and the agencies' response to the litigation, and implementation of the Survey and Manage mitigation measures, among other reasons. Under the Preferred Alternative in the 2003 Survey and Manage Draft SEIS (USDA, USDI 2003), agencies are expected to come closer to meeting the PSQ.

The Oregon BLM regeneration harvest timber sales sold during fiscal years 1999-2001 were reduced by 89 percent when compared to the fiscal year 1995-1998 timeframe. Regeneration harvest sales of stands 200 years and older was reduced by 88 percent during this timeframe. The 1995-1998 timber sales were 22 percent less than the harvest assumptions under the Northwest Forest Plan (source: BLM Annual Program Summaries).

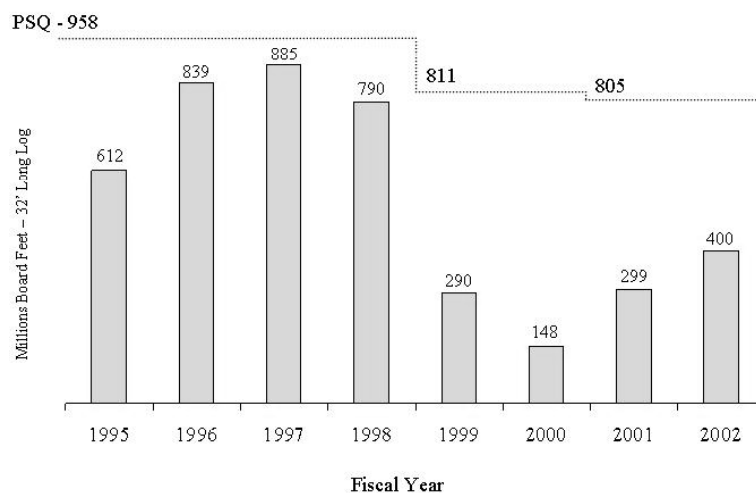


Figure 2. Timber Sale Volume Offered in Comparison to PSQ, 1995-2002

The following example shows the connection between the PCFFA litigation and the ability to meet the adjusted PSQ associated with Alternative 9. In Fiscal Years 2001, 2002, and 2003, the Oregon BLM provided interim guidance on how to prepare and offer timber sales, given the uncertainty resulting from the PCFFA litigation. The most recent BLM Information Bulletin of the three (IB-OR-2003-026) stated:

“The nature of the situation dictates the development of a FY 2003 Timber Sale Plan that continues to place interim emphasis on partial cuts. This emphasis (a continuing interim strategy) is driven by circumstances in an attempt to effectively utilize appropriated funds and implement the Allowable Sale Quantity (ASQ) and socioeconomic objectives of the [Northwest Forest Plan] to the maximum extent possible. It is anticipated that as the current challenges are resolved, the emphasis for balanced [Northwest Forest Plan] implementation, i.e., partial cuts, regeneration cuts, restoration as a requirement of timber sale contracts, etc., will resume.”

These interim guidelines are not considered BLM policy, but they do indicate how the BLM has responded to the current uncertainty. If the BLM’s interim approach were to be carried out over time, harvest levels more like Alternative 1 in the Northwest Forest Plan would be likely.

Monitoring and Adaptive Management

Monitoring and evaluation occurs as part of every Resource Management Plan. Many project-level decisions also include monitoring and adaptive management plans. Each National Forest and BLM District publishes monitoring results relevant to implementation of their respective Resource Management Plans. Project plans include monitoring to ensure they are implemented as planned.

The Northwest Forest Plan Record of Decision, Attachment A, Section E provides for a monitoring plan. This plan has been implemented: since 1996, implementation and effectiveness of the ACS across the Northwest Forest Plan area has been assessed through the Interagency Regional Program. This program conducts broad-scale monitoring on federally managed lands within the Northwest Forest Plan area and represents the combined monitoring efforts of eight federal agencies and partnerships with state agencies and academic institutions.

The 2001 field season marked the sixth consecutive year of the Northwest Forest Plan implementation monitoring program. This program is designed to determine whether the Record of Decision and its corresponding standards and guidelines are consistently followed across the Northwest Forest Plan area. Overall, compliance in meeting the Northwest Forest Plan standards and guidelines was 98 percent for the 21 projects and watersheds monitored in 2001 (Regional Implementation Monitoring Team 2001).

Detailed implementation monitoring results are available in the Biological Assessment and in individual monitoring reports. Other ongoing efforts to evaluate the effectiveness of the ACS at watershed and broader scales include the Aquatic Riparian Effectiveness Monitoring Plan (AREMP), which was approved in March 2001 and published in 2003 (Reeves et al. 2003). Under the AREMP, the condition of various watersheds across the Northwest Forest Plan area will be evaluated. Over time, AREMP will show whether watershed conditions are improving. The AREMP will provide information in a decade or more at the province scale.

The authors of the Aquatic Conservation Strategy stated that:

“We emphasize, however, that it will require time for this strategy to work. Because it is based on natural disturbance processes, it may take decades to over a century to accomplish all of its objectives.”

The Northwest Forest Plan also requires adaptive management. Adaptive management is a continuing process of action-based planning, monitoring, researching, evaluating, and adjusting with the objective of improving the implementation and achieving the goals of Alternative 9. Under the concept of adaptive management, new information will be evaluated and a decision will be made whether to make adjustments. Agencies will use monitoring results associated with individual unit plans to guide future actions. The watershed analysis process encourages informal updates as new information becomes available. Updated watershed analyses are likely to be an important future source of monitoring information.

Recent water quality monitoring reports have been published in Oregon.⁸ The “Oregon State of the Environment Report 2000” describes the conditions and trends of Oregon’s environment and suggests ecosystem indicators to help track environmental progress in the state. The Oregon Department of Environmental Quality used 129 ambient monitoring stations to develop the Oregon Water Quality Index Summary Report for Water Years 1992 – 2001 (Cude 2001). Water quality increased at 66 sites, decreased at 7 sites, and stayed the same at 56 sites.

⁸ Similar data are not available for California and Washington.

Potential Changed Conditions to the Affected Environment

The agencies considered whether large wildland fires (and subsequent rehabilitation and salvage activities), floods, (and subsequent rehabilitation and restoration activities), droughts or El Niño weather patterns occurring since 1994 changed the Affected Environment of Environmental Consequences described in FEMAT report or the Northwest Forest Plan FSEIS. These natural episodic disturbance events are an integral part of process-based management contained in the Aquatic Conservation Strategy. As stated in the FEMAT report (p. V-29) and the Northwest Forest Plan FSEIS (p. B-81):

“The heart of the approach is the recognition that fish and aquatic organisms evolved within a dynamic environment.”

The Northwest Forest Plan provided an adaptive management approach to environmental conditions and events. The Northwest Forest Plan recognized that ecosystems are not static but are ever changing in response to conditions and events.

The agencies determined that large fires, flood, drought, and El Niño events occurring since 1994 are not changed conditions that would invalidate the four components of the ACS (watershed analysis, watershed restoration, Key Watersheds, Riparian Reserves). The Northwest Forest Plan and Aquatic Conservation Strategy require consideration of natural disturbances in land management decisions. The events occurring since 1994 are factored into the planning process at all scales. The agencies have responded to events such as fires and floods with appropriate action that follows Northwest Forest Plan principles. Further information about potential changed conditions is in Appendix E.

New Listings under Endangered Species Act and Clean Water Act

Some people have suggested that new listings of fish under the Endangered Species Act, or new listings of streams as water quality impaired under the Clean Water Act, are changed conditions that may trigger a reconsideration of the Northwest Forest Plan.

The Northwest Forest Plan considered effects on 259 species of fish.

The Riparian Reserves were widened in Alternative 9 to increase the probability that viability of at-risk fish species would be maintained. Probability of maintaining viability of at-risk fish species increased from 65 percent to 80 percent due to the increased Riparian Reserve widths.

Approximately 20 species of fish have been proposed for listing, or listed under the Endangered Species Act since 1994.⁹ The Northwest Forest Plan anticipated Endangered Species Act listings (FSEIS Chapter 3&4 p. 202):

“...the [Aquatic Conservation] strategy can succeed at maintaining and restoring aquatic and riparian habitats regardless of what happens on non-Federal lands, but that would not ensure the population viability of many of the fish stocks evaluated in the SEIS. For these reasons, it is not possible to determine whether any of the alternatives in the SEIS would preclude listing of fish species under the Endangered Species Act.”

Nancy Foster, Ph.D., Acting Assistant Administrator for NMFS, wrote a comment letter to the Northwest Forest Plan Draft SEIS. In her letter, Dr. Foster wrote:

“The relatively large Riparian Reserves...combined with the requirements to conduct watershed analysis prior to any resource management activities and to implement comprehensive watershed restoration to accelerate habitat recovery, could avoid harm to anadromous fish in many watersheds throughout the range of the northern spotted owl.”

Ten consultations and/or conferences with the NOAA Fisheries or USFWS have occurred related to 28 Resource Management Plans within the Northwest Forest Plan area. There have been no significant changes to the Resource Management Plans since the dates of the Plan-level consultations and conferences. The effects of implementing the Resource Management Plans have not materially changed since the issuance of the Plan-level Biological and Conference Opinions. The Biological Assessment summarizes the history of Endangered Species Act consultation related to these species.

Approximately 83 sub-basins within the Northwest Forest Plan area contain streams that have been listed as impaired because of high water temperature and/or sediment loads. Several of these listings have occurred since 1994. This increase in listed waters is not necessarily related to an increase in degraded conditions.

⁹ See Appendix D for current Endangered Species Lists.

Since 1994, an intense effort has been underway to collect water quality information about streams that were not previously monitored. The increase in temperature listings has occurred in part because of widespread availability of inexpensive technology that can capture continuous, high quality water temperature data. Appendix F, p. 173 of the Northwest Forest Plan FSEIS notes that:

“Not all areas have been inventoried to cover all riparian and aquatic systems on federal lands within the range of the northern spotted owl.”

Judge William Dwyer ruled on whether the new listings under the Endangered Species Act and Clean Water Act constitute changed conditions under the Northwest Forest Plan:

“The claims regarding certain fish and the declining water quality of streams relates not to new data but to changes in legal status under the Endangered Species Act and...the Clean Water Act; while these listings are important, they do not, in themselves, require a new SEIS.”¹⁰

Timber Harvest on Non-Federal Land

Timber harvest on non-federal land was considered as a possible changed condition. The Northwest Forest Plan FSEIS acknowledged that state timber harvest rules might not be consistent with rules guiding harvest on federal lands. Harvests on non-federal lands were assumed in the 1994 FSEIS. The FSEIS stated that the choice of alternatives in the Northwest Forest Plan would not affect the rate of harvest on non-federal lands. Generally, the effects analysis assumed that non-federal timberlands would be harvested to the extent allowed by state law. Therefore, timber harvesting on non-federal lands since 1994 is not a changed condition and does not invalidate Northwest Forest Plan findings and assumptions.

Secure Rural Schools and Community Self-Determination Act of 2000

In 2000, the Secure Rural Schools and Community Self-Determination Act was signed. Under the Act, counties within the Northwest Forest Plan area elected to receive a guaranteed level of payment, instead of payments that are a direct percentage of federal receipts. Northwest Forest Plan FSEIS findings related to county payments may no longer be accurate.

¹⁰ ONRC Action v United States Forest Service Civ. No. 98-942 WD, August 2, 1999, p 17):

Environmental Consequences

Effects on the Four Components of the ACS

None of the alternatives would change any component of the ACS, nor would any alternative change the role of Riparian Reserves. Riparian-dependent resources would continue to receive primary emphasis and Riparian Reserve standards and guidelines would continue to be applied under all alternatives. Under all alternatives, the role, extent or standards and guidelines for Key Watersheds would not change. Watershed restoration would continue to occur under all alternatives.

The proposed amendment would clarify the documentation needed to comply with standards and guidelines that refer to not retarding or preventing, attaining, being consistent with, meeting or achieving ACS objectives. The proposed amendment would clarify that each project cannot be expected to achieve watershed-scale objectives. The amendment clarifies that short-term, site-level disturbance does not necessarily retard achievement of the watershed-scale objectives. The proposed amendment clarifies the documentation requirements expected of land managers.

The role of Watershed Analysis will not change in any of the alternatives. The direction related to Watershed Analysis in the proposed amendment is consistent with the 1995 Federal Guide for Watershed Analysis. Alternative A explicitly notes that if watershed analysis is not required or available, or does not contain relevant information, the project record will provide evidence that project effects were considered relative to the watershed condition.

The Proposed Action and Alternative A are both intended to contribute to agency success planning and implementing projects that follow Northwest Forest Plan principles, but are not intended to result in site-specific project design changes. Agencies will continue to attempt to implement the Resource Management Plans and attain their goals under all alternatives.

The assumptions of the benefits to fish and aquatic resources based upon the extent of Riparian Reserves as originally envisioned remain valid.

Changes have been proposed to the Survey and Manage program, changes have been proposed for the Forest Service planning rule (36 CFR 219), changes have been approved to the Forest Service appeal rule (36 CFR 215), and changes have been approved for categorical exclusions for both agencies. None of these changes would affect documentation requirements related to the ACS. None of these changes would change the components of the ACS.

The No Action alternative is associated with the greatest risk of not meeting the original intent of the ACS. This is because the existing language has been interpreted to imply too simplistic a relationship between projects and attainment of ACS objectives. The No Action alternative remains ambiguous about the scale at which progress toward attainment of ACS objectives is properly assessed.

The Proposed Action has the second greatest risk of not meeting the original intent of the ACS. The Proposed Action would clarify aspects of the ACS that are ambiguous under No Action. However, many members of the public expressed concern that the Proposed Action might result in unintended consequences that might deviate from the original intent of the ACS. Specifically, passages that refer to all of Northwest Forest Plan Record of Decision Attachment A as “standards and guidelines” would be removed, and a sentence that says “complying with the ACS means that an agency must manage riparian-dependent resources to maintain the existing condition or implement action to restore conditions.”

Alternative A has the least risk of not meeting the original intent of the ACS. Alternative A clarifies the proper scales for evaluation of progress toward attainment of ACS objectives. However, Alternative A retains the passages that refer to all of Attachment A as management direction, and includes a sentence that states: “Under the Aquatic Conservation Strategy, the agencies must maintain existing conditions or implement actions to restore conditions at the fifth-field watershed scale over the long term.”

Effects on the Timber Sale Program

The proposed amendment has the potential to affect agency success implementing the timber sale program envisioned under the Northwest Forest Plan. Timber sales are needed to achieve the socio-economic and ecosystem management goals of the Northwest Forest Plan. The degree to which current PSQs may be attained is the primary indicator for agency success in this regard.

As discussed under Affected Environment, the agencies have not been able to achieve the level of timber sales predicted for the Northwest Forest Plan. The Northwest Forest Plan assumed that 90 percent of the early decades PSQ would come from late-successional and old-growth forest, much of it through regeneration harvest. However, given the court interpretations of the ACS in the PCFFA litigation, the PSQ cannot be sustained, because few timber sales can be designed to avoid all disturbance to aquatic and/or riparian habitat components.

For instance, timber harvest removes canopy and exposes some land to accelerated erosion. Road work associated with the timber sale may result in short-term sedimentation. In the PCFFA litigation, the court considered these types of effects incompatible with achieving ACS objectives.

Future timber Sale levels under No Action are not precisely known. The agencies are funded to implement projects that follow Northwest Forest Plan principles, including timber sales. Their success implementing these projects has been hindered by current ACS interpretations.

In this regard, expected future harvest levels under No Action are more like harvest levels in Alternative 1 in the Northwest Forest Plan FSEIS. Under Alternative 1, “essentially all old-growth forests would be protected; forests adjacent to streams would receive significant protection to protect fish; and...some forest cover would be retained in areas where timber harvest is allowed.”

Several public comments noted that protection of all old-growth forests is critical to achieving ACS objectives. This belief is not supported by the Northwest Forest Plan Record of Decision, which approved both the ACS and a timber program that expected harvest within some old-growth forest stands.

Alternative 1 would have resulted in a long-term PSQ that is less than one-tenth of the PSQ predicted for Alternative 9. Under No Action, timber sale levels are likely to fluctuate, but would likely drop over time. Without regeneration harvest and harvest within older forest stands, expected levels of harvest on non-reserved lands would not be sustainable.

As the BLM Information Bulletin demonstrates (see Appendix A), the agencies have been compelled to concentrate their efforts on offering timber in stands where commercial thinning opportunities exist. These opportunities will eventually diminish. Without regeneration harvests, timber Sale levels could approach Alternative 1 (in the 1994 FSEIS).

The degree to which the Proposed Action or Alternative A could attain PSQ associated with Alternative 9 (and adjusted in individual RMPs) cannot be predicted precisely. Groups who believe that timber sales within late-successional and old-growth forests are incompatible with the ACS are likely to continue to initiate appeals and litigation. The agencies believe that such harvest can be compatible with the ACS, as evidenced by the Northwest Forest Plan Record of Decision and supporting documentation, which included both the ACS and harvest within late-successional and old-growth forest in Matrix lands. Other factors besides ability to harvest within late-successional and old-growth forests may affect the agencies’ ability to attain PSQ.

Land managers are expected to be more successful planning and implementing timber sales that follow Northwest Forest Plan principles under the Proposed Action and Alternative A because these alternatives clarify the documentation requirements to demonstrate that projects follow the ACS. This clarification is expected to result in the range of silvicultural prescriptions outlined in individual Resource Management Plans.

The agencies acknowledge the uncertainty about the degree to which the alternatives will result in the desired harvest levels. The NEPA regulations at 40 CFR 1502.22 provide guidance: "If, when evaluating significant adverse effects on the human environment, information essential to a reasoned choice among alternatives is either missing or incomplete..." The agencies do not believe that any alternative would result in adverse effects beyond those already considered in the Northwest Forest Plan FSEIS in 1994. All of the alternatives would result in impacts within the range predicted in 1994. Frequently, the 1994 Northwest Forest Plan FSEIS lumps Alternatives 1 and 9 in reference to effects on aquatic ecosystems.

The agencies considered the potential changed conditions and monitoring results, along with a review of the science related to the Northwest Forest Plan to make this determination. Thus, the uncertainty about how well each would meet pre-determined Northwest Forest Plan goals would not result in significant adverse effects that were not already considered in 1994.

Neither the Proposed Action nor Alternative A would directly affect timber sales covered under biological opinions that were enjoined in PCFFA v. NMFS. New biological opinions would have to be issued by NOAA Fisheries before these projects could be implemented. NOAA Fisheries and the USFWS have developed new approaches to consultation that do not rely on the ACS as a surrogate for Endangered Species Act jeopardy analysis.

Cumulative Effects on the Timber Sale Program

Changes have been proposed for the Forest Service planning rule (36 CFR 219), changes have been approved to the Forest Service appeal rule (36 CFR 215), and changes have been approved for categorical exclusions for both agencies. None of these changes would affect the design of projects that follow Northwest Forest Plan principles. None of the rule changes seek to increase PSQ associated with Alternative 9 (as adjusted in individual Resource Management Plans - RMPS) but they are likely to contribute to agency success meeting the PSQ.

Currently, the agencies are also considering further modification/elimination of the Survey and Manage mitigation measures in response to litigation. The effects of further modifications to the Survey and Manage mitigation measures are disclosed in a separate SEIS. The Preferred Alternative in the 2003 Draft SEIS for Survey and Manage would help increase agency success planning and implementing projects that follow Northwest Forest Plan principles. The changes do not seek to increase PSQ relative to Alternative 9, but is likely to contribute to agency success meeting the PSQs for individual RMPs.

A recent settlement agreement on a lawsuit pertaining to the federal timber sale program on Oregon and California (O&C) railroad lands reinforces the agencies' commitment to meeting PSQ. Under the settlement agreement, the FS and BLM agreed to attempt to meet PSQ in Matrix lands and increase restoration thinning in reserves as part of the settlement agreement. Individual Resource Management Plans will need to consider the role of O&C lands and determine future timber Sale levels. This settlement will not increase PSQ in the foreseeable future.

Effects on Other Activities that Implement the Northwest Forest Plan

As discussed in Chapter 1, several types of projects have the potential to be stopped or delayed due to current interpretations of the ACS. The language that has resulted in difficulty producing timber sales has also resulted in difficulty implementing the other types of projects. As stated in Chapter 1, the agencies plan and implement integrated projects; watershed restoration is often coupled with timber sales. Habitat conditions within Riparian Reserves have improved through precommercial and commercial thinning to promote more rapid development of large conifers for large woody debris recruitment and shade. Stream restoration work to restore habitat complexity, such as large wood placement or creation of off-channel rearing habitat, has also been accomplished. Any projects that are connected to timber sales could be stopped or delayed as described above.

Besides timber harvest, types of projects that could be hindered by impossible expectations include:

- Non-commercial forest management
- Actions associated with timber harvest, including transportation system treatments, culvert removal and replacement.
- Restoration silviculture in Riparian and Late-Successional Reserves, hazardous fuels reduction and forest health thinning, especially projects that include an element of commercial harvesting.
- Special uses, mining, livestock grazing, and recreation.

- Watershed restoration projects such as stream enhancements, fish passage improvements, and road decommissioning.¹¹

The Northwest Forest Plan did not include predictions of levels of achievement of any of these activities. The O&C settlement establishes a volume of timber to be produced from thinning within reserves; this implies a certain level of accomplishment.

Under No Action, the agencies would continue to plan projects that follow Northwest Forest Plan principles. These projects would be designed to comply with applicable standards and guidelines and contribute to meeting Resource Management Plan goals and objectives. Any of these projects could be subject to ambiguous expectations if they have any possible effects on the aquatic environment.

In general, the agencies expect to be more successful planning and implementing all types of projects that follow Northwest Forest Plan principles under the proposed amendment. The proposed amendment would clarify the documentation needed to demonstrate compliance with standards and guidelines.

Environmental Effects of No Action

The precise environmental effects of No Action are not known. Site-specific analysis under NEPA would continue to occur for all proposed projects. As discussed previously, agencies would continue to plan projects that follow Northwest Forest Plan principles (Alternative 9). Managers would attempt to implement their respective Resource Management Plans. However, some of these projects would be subject to ACS interpretations that may delay or stop the project. Based on public comments received on the Draft SEIS, the projects most likely to be stopped or delayed include an element of timber harvest within late-successional and old-growth forest.

The comments state that “faithful implementation of the ACS” would exclude such harvest. Given these attitudes, land managers would be encouraged to avoid such harvests (see BLM Information Bulletin for example of “interim” direction). In this regard, the results of No Action would more likely result in harvest levels (and environmental effects) more like Alternative 1.

¹¹ Other examples of restoration projects include (but are not limited to) prescribed burning, underplanting, snag and down wood management, invasive weed control. See Appendix D (Biological Evaluation) for further discussion about various categories of federal actions generically authorized in Resource Management Plans.

An ironic result of PCFFA v. NMFS is that federal timber sale planners have become reluctant to include restoration work in proposed timber sale projects if the restoration work may result in disturbance to aquatic or riparian habitats and triggers the need for Endangered Species Act consultation. Under No Action, projects with any short-term impact could have the potential to be stopped or delayed due to ACS misinterpretations, appeals, and litigation. In the short term, delaying or avoiding projects could have some positive benefits on the physical and biological environment, since the risk of short-term adverse effects from the projects would be reduced or eliminated. However, opportunities to restore watersheds through cumulative action over time could be foregone.

Fuels management projects, especially those that include an element of commercial harvesting, could be stopped or delayed due to ACS interpretations. Implementation of these projects is needed to achieve goals of the National Fire Plan. If the ACS interpretation results in delayed implementation of fuels reduction projects, the risk of adverse effects of wildland fire could increase.

Delays in restoration can have negative longer-term consequences to aquatic ecosystems. Under No Action, less active restoration would likely occur than under the Proposed Action. Reduced levels of restoration could reduce the rate of watershed recovery. Reductions and delays in project implementation could lead to increased risk of ongoing and catastrophic adverse effects from road failure and landslides. Appendix V-J of the FEMAT report stated that processes that have degraded watersheds would not be reversed without a comprehensive restoration program.

Over the long-term, No Action would likely have physical and biological effects that are more similar to Alternative 1 in the Northwest Forest Plan than Alternative 9. Frequently, the Northwest Forest Plan FSEIS lumped Alternatives 1 and 9 in reference to effects on aquatic ecosystems, because both of these alternatives included large Riparian Reserves and the Aquatic Conservation Strategy (see Appendix B). No Action is more like Alternative 1 to the extent fewer projects would likely be implemented.

Socio-economic Effects of No Action

FEMAT and the 1994 FSEIS include detailed socio-economic analysis, which is not re-evaluated here. This evaluation focuses on conditions related to timber harvest since 1999 and the 2000 Secure Rural Schools and Community Self-Determination Act.

As described previously, timber harvest levels expected under No Action are closer to levels predicted for Alternative 1 (in the 1994 FSEIS) than Alternative 9. Appendix B demonstrates that as a result of the reduced harvest levels, the No Action alternative would have socio-economic effects more similar to Alternative 1 than Alternative 9.

One difference between the 1994 analysis and the current situation is the de-linking of payments to counties from federal timber sale levels. In the past, a percentage of proceeds from timber sales on federal lands were paid to counties in lieu of taxes. These payments have declined over time as timber harvest has declined (see 1994 FSEIS for detailed discussion). In 2000, the Secure Rural Schools and Community Self-Determination Act was signed. The Act allowed counties to choose a guaranteed level of payments, rather than payments based on timber harvests. These payments are higher (on average) than assumptions made in 1994. Effects on counties (i.e. schools, roads, etc.) are more affected by laws such as the Secure Rural Schools Act than any of the ACS SEIS alternatives. Further information about payments to counties is in the analysis files.

These payments are scheduled to expire (with the Act) in 2006. In 2007, assuming the guaranteed payments are not reauthorized and payments are again sensitive to harvest levels, the effects of No Action are predicted to be most like Alternative 1 in the 1994 FSEIS.

Environmental Effects of Proposed Action and Alternative A

Neither the Proposed Action nor Alternative A changes the predicted effects of Alternative 9 in the Northwest Forest Plan (see Appendix B). Physical and biological effects are adequately described in the 1994 FSEIS.

The Northwest Forest Plan acknowledges that disturbances are natural occurrences within forested habitats and that management of this habitat without disturbance is impossible. Some level of disturbance is necessary, and even beneficial to the ecosystem. The clarified language for the ACS would result in improved decisions that reflect these concepts. Short-term adverse effects associated with disturbance (such as increased turbidity or streambed sedimentation) accrue from activities such as culvert removal and replacement, road obliteration, and other restoration activities in riparian areas or streams. These actions are intended to provide for long-term benefit to aquatic and riparian habitats.

The risk of adverse short-term, site-level impacts would increase proportionately to the amount of work implemented. Extent and duration of these effects would be considered in project-level analysis.

The agencies considered the potential effects of the proposed amendment (Proposed Action/Alternative A) on a variety of wildlife, fish, and plant species of concern. A Biological Evaluation (BE) was prepared that addresses species listed or proposed under the Endangered Species Act (ESA), as well as Forest Service sensitive species and their habitats within the Northwest Forest Plan area.

The change in language itself does not approve any specific projects and would not result in any effects on species or habitat. Further disclosure under NEPA and the ESA would occur before specific projects would be approved. The BE states that the proposed amendment “would have no effect to any ESA-listed species, or on designated or proposed critical habitat.” As Appendix B demonstrates, the proposed amendment would not alter any Northwest Forest Plan conclusions or assumptions related to species viability.

Forest Service biologists have also determined that the proposed amendment would have “no impact” on any sensitive species identified on the Region 6 and 5 Regional Forester’s Sensitive Species Lists. The species lists and BE are included in the analysis files.

NOAA Fisheries recently reviewed the status of all listed salmon and steelhead within the Northwest Forest Plan area. The FS and BLM have initiated consultation and a Biological Assessment (BA) prepared on these species for Resource Management Plans that would be amended under Alternative A. The BA is in Appendix D. The BA lists and describes the status of a fish species and considers effects on these species from all activities typically conducted on FS and BLM lands, including forest management, recreation, grazing, mining, watershed restoration, fish and wildlife habitat management, fire and fuels management, land acquisitions and exchanges, and special uses.

The BA concludes, “The land allocations result in approximately 80 percent of federal lands in some sort of reserve status across the Northwest Forest Plan area...This provides benefits to ESA-listed fish species by minimizing the amount of ground-disturbing activities and potential adverse impacts to water quality and fish habitat.” The BA also states, “...the implementation of standards and guidelines, particularly those for Riparian Reserves, Key Watersheds, and Watershed Analysis are beneficial to ESA listed species and critical habitat by providing guidance for the design, prioritization and implementation of actions with the potential to affect riparian-dependent resources.”

The BA acknowledges that the “land allocations where most of the potential ground-disturbing actions may occur is Matrix, Adaptive Management Areas and Managed Late-Successional Reserves.” The BA sums the land area within these three allocations and concludes that they cover approximately 7 to 26 percent of the Northwest Forest Plan area.

The BA states “The design, location, and timing of federal timber sales planned in accordance with the Northwest Forest Plan and its Aquatic Conservation Strategy will minimize the potential to: 1) reduce stream shade canopy to the extent that water temperatures are measurably increased; 2) reduce the supply of large wood debris; 3) alter stream flow regimes; and 4) accelerate surface erosion and mass wasting to the extent that there is increased sediment delivery and turbidity in streams....When conducting forest management and watershed restoration activities, there may be an increase in the potential for short-term adverse effects to ESA listed fish species, but these effects are within the original scope analyzed in earlier plan-level Biological Opinions.” The BA also concludes, “There is the potential for an increase in long-term benefits since restoration will be implemented...”

The Biological Assessment also finds that “In summary, the integration of the ACS components of WA, Key Watersheds, Riparian Reserves, watershed restoration, and associated [standards and guidelines] result in a management framework that minimizes or avoids the potential negative impacts of land management actions to water quality and fish habitat, while also restoring aquatic and riparian habitat conditions. This will enhance the long-term potential to sustain populations of at-risk fish species. Consequently, the ACS as a strategy and its individual components are beneficial to ESA-listed fish species and critical habitat.”

The BA goes on to state that, “Despite the protective and restorative aspects of NWFP and ACS implementation, a sub-set of actions will nevertheless result in adverse effects to ESA-listed and candidate fish species and proposed or designated critical habitats. These adverse effects are typically short-term in nature and often associated with watershed restoration efforts. Therefore, most of the RMPs ‘may affect, likely to adversely effect’ (LAA) [some] listed species or critical habitat.”

Socio-economic Effects of the Action Alternatives

Under the Proposed Action and Alternative A, the agencies would likely increase timber harvest levels, up to levels envisioned Alternative 9 in the 1994 FSEIS and adjusted in individual RMPs. To the extent that timber harvest levels reach these levels, the socio-economic effects of the action alternative are likely to be similar to the effects predicted for Alternative 9. As discussed previously, the Secure Rural Schools and Community Self-Determination Act of 2000 allowed counties to choose a guaranteed level of payments, rather than payments based on timber harvest. However, the Act expires in 2006. FEMAT and the 1994 FSEIS include detailed socio-economic analysis, which is not re-evaluated here.

Required Disclosures

This section focuses on Alternative A.

Relationship Between Short-term Uses and Long-term Productivity

Alternative A does not approve any short-term uses nor would it have any effects on long-term productivity. The ACS is still intended to protect long-term productivity of aquatic and riparian ecosystems within the Northwest Forest Plan area.

Conflicts with Other Plans

Other Analysis Efforts Within the Northwest Forest Plan Area

Other planning efforts are underway within the Northwest Forest Plan area that may affect various Resource Management Plans and how they are implemented. The agencies are currently considering alternatives to modify or eliminate the Survey and Manage mitigation measure in the Northwest Forest Plan. In 2001, the Secretaries of Agriculture and the Interior amended the Northwest Forest Plan with the Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures standards and guidelines.

Timber industry and county government associations litigated that decision. On September 30, 2002, the Secretaries entered into a settlement agreement with that required the BLM and Forest Service to examine an alternative “that replaces the Survey and Manage mitigation requirements with existing Forest Service and BLM special status species programs to achieve the goals of the Northwest Forest Plan through a more streamlined process” in a new SEIS.

The Draft SEIS to eliminate or modify the Survey and Manage Mitigation Measure Standards and Guidelines was published in April 2003 (USDA, USDI 2003).

Other ongoing analysis efforts within the Northwest Forest Plan area include the FS "Invasive Plant EIS," the BLM and FS "Port-Orford-cedar EIS," and the BLM "Vegetation Treatments Programmatic EIS." The Port-Orford-cedar EIS was necessitated by the Kern v. BLM decision of the Ninth Circuit. The BLM Vegetation Management EIS was initiated to (among other things) address problems created by court injunctions from the 1980's that still restrict BLM herbicide use.

The cumulative effects of proposed Northwest Forest Plan amendments are similar to effects analyzed in the 1994 Northwest Forest Plan FSEIS for Alternative 9. None of these efforts seek to change the predicted effects of the ACS. The decision whether or not to amend ACS language is not dependent on the other planning efforts.

As discussed in the 1994 FSEIS: "In addition, all ground-disturbing actions are conducted only after site-specific environmental analysis has been completed. This site-specific analysis will also analyze the cumulative impacts of the project alternatives on adjacent lands and resources, and on the watershed. This provides opportunities to detect and minimize cumulative environmental effects that cannot be ascertained at the programmatic level of this SEIS."

Other Concurrent Regulatory Proposals that May Affect Aquatic Resource Management

This SEIS incorporates by reference the discussion in the Northwest Forest Plan FSEIS concerning conflicts with other plans (USDA, USDI 1994a, pp. 3&4-319 and 320, and Appendix D). The proposed amendment would not alter the conclusions of the Northwest Forest Plan FSEIS regarding the possible conflicts with other plans.

Currently, several regulatory proposals about federal land management have been proposed or adopted. These proposals do not conflict with the Northwest Forest Plan.

Irretrievable and Irreversible Commitment of Resources

The proposed amendment does not make any irretrievable or irreversible commitments of resources beyond those predicted in the Northwest Forest Plan FSEIS (p. 3&4-321):

“Implementation of projects in accordance with the preferred alternative [Alternative 9] would result in some, if not all, loss of utility of habitat for late-successional and old-growth related species for the period of time needed for that habitat to grow again—a commitment of over a century. Some old-growth forest stands would be harvested under the preferred alternative. Although certain economic and social values will be saved at the point of harvest, these areas will then not contain as full an array of ecological and human values associated with old-growth forests as stands not harvested. Depending on the physiographic province and site, it would be several centuries or more before the full array of those characteristics return.”

Civil Rights and Environmental Justice

No disparate or adverse effects are identified to groups of people identified in Civil Rights statutes or Executive Order 12898 (Environmental Justice) from Alternative A. This finding is due largely to the administrative nature of the proposed change (i.e. a change in wording of an existing SEIS to clarify requirements). A Civil Rights Impact Analysis was prepared to comply with all applicable civil rights statutes, including Title VI of the Civil Rights Act of 1964.

Effects on Critical Elements

Both agencies require disclosure of effects on several critical elements of the human environment. These include air quality, Areas of Critical Environmental Concern, Cultural Resources, prime and unique farm and forest lands, floodplains, Native American religious concerns, threatened and endangered species, hazardous materials and solid waste, surface and ground water quality, wetlands and riparian zones, wild and scenic rivers, noxious weeds and environmental justice. The BLM requires that these elements be specifically addressed in environmental impact statements (H-1790-1).

The proposed amendment does not have the potential to affect any of these elements beyond the levels disclosed previously in the Northwest Forest Plan FSEIS (see Appendix B for details). Appendix D includes a Biological Assessment for certain fish species listed under the Endangered Species Act. The Biological Assessment summarizes the history of Endangered Species Act consultation related to these species. As discussed above, a Civil Rights Impact Analysis was prepared for the proposed amendment.

American Indian Rights and Resource Issues

Discussion about tribal treaty rights and trust resources starts on page 54 of the Northwest Forest Plan Record of Decision. American Indian treaty rights and trust resources will be protected under the proposed amendment. A reduction in timber sales may affect tribes' ability to secure resources for traditional and cultural uses, such as logs for canoes and long houses.

The proposed amendment would affect management of the Coquille Forest. These lands are owned by the Coquille Indian Tribe, are part of the Coquille Indian Reservation, and are held in trust by the United States. An Act of Congress in 1996 transferred ownership of about 5,400 acres of federal land within the Northwest Forest Plan area transferred to the Coquille Indian Tribe. The Act required that Coquille Forest be managed subject to the standards and guidelines of federal Forest Plans on adjacent or nearby federal lands. The proposed amendment has effects on tribal treaty rights and trust resources similar to Alternative 9 in the Northwest Forest Plan.

CHAPTER 5. CONSULTATION AND COORDINATION

This SEIS was prepared by an Interagency Interdisciplinary Team (see List of Preparers below). Several agencies provided consultation and coordination input. The primary agencies involved include:

Department of Commerce,
 National Oceanic and Atmospheric Administration (NOAA Fisheries), ,
Regional Ecosystem Office Environmental Protection Agency
United States Department of the Interior,
 Bureau of Land Management,
 Bureau of Indian Affairs,
 Solicitors' Office,
 U.S. Fish and Wildlife Service (USFWS),
United States Department of Agriculture,
 Forest Service,
 Office of General Counsel,
 Pacific Northwest Research Station

Distribution of the Draft Supplemental Environmental Impact Statement

This Draft Supplemental Environmental Impact Statement (SEIS) was mailed to the following individuals, groups, and organizations. The list includes elected officials; federal agencies; state, local, and county governments; American Indian Tribes and Nations; businesses; other organizations; libraries; and individuals. It is also available via the Internet at: <http://www.reo.gov/acs/>.

Elected Officials

California

Senator Barbara Boxer
Senator Dianne Feinstein
Representative Sam Farr
Representative Wally Herger
Representative Barbara Lee
Representative Robert Matsui
Representative George Miller
Representative Doug Ose
Representative Nancy Pelosi
Representative Mike Thompson
Representative Lynn Woolsey

Oregon

Senator Gordon Smith
Senator Ron Wyden
Representative Earl Blumenauer
Representative Peter DeFazio
Representative Darlene Hooley
Representative Greg Walden
Representative David Wu

Washington

Senator Maria Cantwell
Senator Patty Murray
Representative Brian Baird
Representative Norman Dicks
Representative Jennifer Dunn
Representative Richard Hastings
Representative Jay Inslee
Representative Rick Larsen
Representative Jim McDermott
Representative George Nethercutt
Representative Adam Smith

Intergovernmental Advisory Committee (to the Regional Ecosystem Office)

Dave Allen
U.S. Fish and Wildlife Service
Elaine Brong
Bureau of Land Management,
OR/WA
Lance Clark
State of Oregon Rep.
Kent Connaughton
USDA Forest Service, Region 5
Merv George, Jr.
CA Indian Forest and Fire
Management Council
Linda Goodman
USDA Forest Service, Region 6
Bob Graham
Natural Resources
Conservation Service
David Herrera
Northwest Indian Fisheries
Commission
Colonel Richard Hobernicht

U.S. Army Corps of Engineers
Jon Jarvis
National Park Service
Anne Kinsinger
U.S. Geological Survey
Robert Lohn
National Marine Fisheries
Service
Albert McKee
Representative of Washington
Counties
Rocky McVay
Association of O & C Counties
Mary Nichols
California Resources Agency
Robert Nichols
WA State Senior Executive
Policy Assistant
Jennifer Orme-Zavaleta
Environmental Protection
Agency

Michael Pool
Bureau of Land Management,
CA
Dave Powers
Environmental Protection
Agency
Tom Quigley
USDA Forest Service, PNW
George Smith
Intertribal Timber Council
Joan Smith
Representative of California
Counties
Stan M. Speaks
Bureau of Indian Affairs
Steve Thompson
U.S. Fish and Wildlife Service
CA/NV

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Federal Agencies

Advisory Council on Historic Preservation	Pacific Northwest Research Station	Conservation Dist.
Bonneville Power Administration	Pacific Southwest Research Station	National Park Service
Environmental Protection Agency	National Agriculture Library	Ft. Vancouver National Historic Site
Geographic Implementation Unit	Natural Resource Conservation Service	Olympic National Park
Operations Office	OPA Publication Stockroom	Redwood National Park
Region 9		Redwood Sciences Lab
Region 10	U.S. Department of Commerce	Office of the Regional Solicitor
Federal Energy Regulatory Commission	NOAA Fisheries (National Marine Fisheries Service)	Office of the Secretary
Portland Federal Executive Board	U.S. Department of Defense	Fish and Wildlife Service
Regional Ecosystem Office	Army Corp of Engineers	U.S. Geological Survey
U.S. Army	PE PF	Biological Resources Division
U.S. Coast Guard	Seattle District	Pacific Northwest District
U.S. Department of Agriculture	Walla Walla District	U.S. Department of Justice
Animal and Plant Health Inspection Service	Naval Submarine Base Bangor	U.S. Ecosystem Restoration Office
Environmental Coordinator of Ecological Services	U.S. Department of Energy	U.S. Housing and Urban Development
Forest Service	U.S. Department of Interior	U.S. Small Business Administration
Pacific Northwest Regional Office and Forests	Bureau of Indian Affairs	U.S. Department of Transportation
Pacific Southwest Regional Office and Forests	Bureau of Land Management	Federal Aviation Administration
	National Park Service	Federal Highway Administration
	Office of Environmental Policy and Compliance	
	Bureau of Reclamation	
	Klamath Soil & Water	

State, County, and Local Governments

<u>California</u>	Office of the Governor	County Supervisors
State of California	Parks and Recreation	Eel - Russian River Commission
Caltrans	Resources Agency	Glenn County
Department of Forestry	State Clearinghouse	Agriculture Department
Department of Forestry and Fire Protection	California Regional Water Quality	Board of Directors
Department of Water Resources	City of Yreka	Board of Supervisors
Fish and Game Commission	Colusa County, Agriculture Department	Coop Extension Office
Lands Commission	Del Norte County Board of	Planning Department
		Humboldt County Board of Supervisors

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Lake County Board of Supervisors
Mendocino County
 Board of Supervisors
 Cooperative Extension
 Planning Department
 Water Agency
North California Water Association
Pinecrest Permittees Association
Shasta County Board of Supervisors
Siskiyou County
 Administrators
 Board of Supervisors
Sonoma County Conservation Action
Tehama County
 Board of Supervisors
 Planning Department
Trinity County, Board of County Supervisors

Colorado

San Miguel County

District of Columbia

Rural Utilities Service

Oregon

State of Oregon
 Department of Agriculture
 Department of Energy
 Department of Environmental Quality
 Department of Fish & Wildlife
 Department of Forestry
 Department of Geology and Mineral Industries
 Department of Human Resources
 Department of Revenue
 Department of

Transportation
 Employment Department
 Executive Department
 Farm Bureau Federation
 Historic Preservation Office
 Marine Board
 Office of The Governor
 Parks And Recreation
 Public Interest Research Group
 Small Business Administration
 Water Resources Department
Association of O&C Counties
Association of Oregon Counties
City of Cottage Grove
City of Eugene, Parks and Recreation District
City of Klamath Falls
Coos County Board of Commissioners
Curry County Board of Commissioners
District 17 Watermaster
Douglas County
 Board of Commissioners
 Natural Resources
Conservation Service
 Planning Department
Hood River County
Grants Pass & Josephine County Chamber of Commerce
Jackson County Commissioners
Jefferson County Commissioners
Josephine County
 Courthouse
 Forestry Department
 Planning Department
Klamath Basin Water Resources Advisory Commit
Klamath County
Klamath County Commissioners
Klamath Irrigation District
Lake County

Lane County Commissioner
Meadows Drainage District
Mohawk Watershed Planning Group
Northwest Power Planning Council
Portland Chamber of Commerce
Portland Water Bureau
Rogue Institute of Economy And Ecology
Rogue Valley Council of Governments
Southeastern Oregon Advisory Council
Umpqua Regional Council of Governments
Wasco County Commissioners

Washington

State of Washington
 Department of Ecology
 Department of Fish and Wildlife
 Department of Natural Resources
 Department of Transportation
 Executive Policy Office
 Office of The Governor
Chelan County Planning Department
City of Port Townsend
Clallam County Commissioner
Forks Chamber of Commerce
Jefferson County Commissioners
Lewis County Commissioners
Mason County Commissioner
Skagit County
Skamania County Planning Department
Washington State Association of Counties
Washington Environmental Council

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American Indian Tribes and Nations

Big Valley Rancheria	Intertribal Timber Council	Resighini Rancheria
Blue Lake Rancheria	Jamestown S'kallam Tribe	Robinson Rancheria Pomo Indian Tribe
Columbia River Inter-Tribal Fish Commission	Kalapooya Sacred Circle Alliance	Rohnerville Rancheria
Colville Confederated Tribes	Karuk Tribe of California	Round Valley Indian Tribes
Colville Tribal Office	Klamath General Council	Samish Indian Tribe
Confederated Tribes of Grande Ronde Indians	Klamath Indian Game Commission	Sauk Suiattle Indian Tribal Council
Confederated Tribes of Lower Coos	Lower Elwha S'klallam Tribe	Shasta Nation
Confederated Tribes of Siletz Indians of Oregon	Lummi Indian Business Council	Shoalwater Bay Tribal Council
Confederated Tribes of The Chehalis Reservation	Lummi Tribe of The Lummi Reservation	Siletz Tribal Council
Confederated Tribes of The Warm Springs Reservation of Oregon	Makah Tribe	Snohomish Tribe
Coquille Indian Tribe	Muckleshoot Indian Tribal Council	Squaxin Island Tribal Council
Covelo Indian Community	Native American Heritage Committee	Stillaguamish Board of Directors
Cow Creek Band of Umpqua Tribe of Indians	Native American Program Oregon Legal Services Corp.	Suquamish Tribal Council
Cowlitz Indian Tribe	Nisqually Indian Community Council	Swinomish Indian Tribal Community
Cowlitz Wahkiakum Council of Government	Nooksack Indian Tribal Council	Table Bluff Reservation
Coyote Valley Rancheria	Northwest Indian Fisheries Commission	The Klamath Tribes
Elk Valley Rancheria	Paskenta Band of The Nomlaki	Tolowa Nation
Grindstone Rancheria	Point-No-Point Treaty Council	Tsnungwe Council
Hoh Tribe	Port Gamble Band of S'klallam Indians	Tulalip Board of Directors
Hoopa Tribal Fisheries Department	Puyallup Tribal Council	Twin Rocks Inholders
Hoopa Valley Tribal Council	Quinalt Indian Nation Reservation Ranch	Upper Lake Rancheria
		Upper Skagit Indian Tribal Council
		Yakama Indian Nation Tribal Council
		Yurok Tribe

Businesses

Adobe Rose	Council	Associated Oregon Loggers
Akins & Villavicencio Llp	American Forestry Association	B.S. Roads, Inc.
Alder Creek Lumber Co.	American Rivers, Inc.	BAC Logging
Alpha World International Corp.	Amerititle	Barnes & Associates, Inc.
American Forest and Paper Assn.	Armco	Berry Botanical Garden
American Forest Resource	Associated Oregon Industries	Blue Lake Forest Products, Inc

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Boise Cascade Corporation	Haglund, Kirtley, Kelley and Horngren	McFarland Cascade
Brecher & Volker LLP	Hampton Tree Farms	McKenzie River Guides
Brewley, Inc.	Harwood Products	Merlin Biological
Burlington Northern, Inc.	Heebphoto Inc.	Merrill & Ring
Buse Timber & Sales, Inc.	Hendrix Enterprises	Mountain Title Company
C & D Lumber Co.	Herbert Lumber Co.	Mt. Ashland Association
C.E. Exploration Co.	High Cascade, Inc.	Mt. Hood Meadows
Cascade Timber Consulting	Hillcrest Vineyard	Northwest Forest Resources
Cavanaugh Forest Industries	Home Animation Limited	Northwest Forestry Association
CH2M Hill Northwest	Huffman & Wright Timber Corporation	Northwest Mining Association
Clear Creek Copters, Inc.	Hull Oakes Lumber Co.	Northwest Timber Review
Clifford, Chance, Rogers and Wells Law Firm	Hydro Energy Development Corporation	Northwest Whitewater Excursions
Cobbett Law Office	Independent Thinning	NRM Corp
Columbia Forest Products	Indian Hill LLC	Offices of Marin Psychological Services
Columbia Helicopters, Inc.	Indian Hill Timber Co.	Oregon Forest Industry Council
Conifer Pacific, Inc.	Industrex Unlimited	Overland Express
Crown Pacific	J. Davidson & Sons Construction	Pacific Northwest Ski Areas Assn.
Crystal Mountain	JA Brennan Associates	Pacific Power and Light
David Evans and Associates, Inc.	Jeld Wen, Inc.	Pan Pacific Forestry
Deer Creek Timber, Inc.	K.D. Logging	Perkins Coie LLP
Deixis Consultant	Keller Lumber Co.	Plum Creek Timber Co.
Douglas County Lumber Co.	Ken Sorenson Logging, Inc.	Public Timber Purchasers Group
Douglas Timber Operators	Keslick And Son Modern Arboriculture	Quafco
Dreyer Lapidus Geyer & Van Horn, Inc.	Klamath Insurance Center	Rayonier, Inc.
DRJohnson Lumber Co.	Klamath Potato Growers Association	Resource Recovery Group, Inc.
Earthwise Excavation	Land & Water Consulting, Inc.	Resources Northwest Consultants
East Fork Lumber Co., Inc.	Laughing Horse Book Store	Richard L. Willis Logging
Edaw, Inc.	Law Office of Nancy Page	Roberts Cummings, Inc.
Eel River Sawmills, Inc.	Lee Enterprises	Rocking C Ranch
Enterprise Rent-A-Car	Leo Miller Contracting	Rogue Forest Protective Association
Ericson Air Crane Co.	Logging Engineering Int., Inc.	Rosboro Lumber Co.
Forestry and Resource Consulting	Lone Rock Timber Co.	Roseburg Forest Products
Freres Lumber Co., Inc.	Longview Fibre Corporation	Rough & Ready Lumber Co.
Freshwater Farms	Lusignan Forestry, Inc.	Salt Springs Logging
Future Logging Co.	M&A Broken Limb	Saltman and Stevens, P.C.
Galea Wildlife Consulting	Madroak Logging	SDS Lumber Company
Gary Cook & Associates	Marys River Lumber	Seneca Jones Timber Co.
Georgia Pacific West, Inc.	Mason Bruce & Girard, Inc.	Seneca Sawmill Company
Georgia Pacific Corporation	Mater Engineering, Ltd.	Sequoia Associates
Giustina Land & Timber Co.	Matesol	Sierra Pacific Industries
Glide Lumber Co.		
Gustin Enterprises		

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Silver Butte Timber
Simpson Door Co.
Simpson Investment Co.
Siskiyou Coop., Inc.
Snowy Butte Helicopters
South Umpqua State Bank
Sparkling and Son, Inc.
Spider Webb Ent., Inc.
Starfire Lumber Co.
Stevens Pass Ski Resort
Superior Lumber Co., Inc.
Sustainable Northwest
Swanson Group
Swanson Superior Forest
Product, Inc.
T.H. Ireland, Inc.

The Nicholoff Company
The Timber Company
Thinking, Inc.
Three Rivers Logging Co.
Timber Data Company
Timber Products Co.
Timberland Logging
Trinity River Lumber Co.
US Forest Industries, Inc.
US Timberlands Klamath Falls
LLC
Wards Creek Logging
Washington Belt & Drive
Systems
Washington Contract Loggers
Association

Washington Forest Law Center
Westbrook Land and Timber
Western Forest Protection
Association
Western Timber Co.
Western Wood Products
Association
Westest Logging
Weyerhaeuser Co.
Wilkins, Kaiser, & Olsen
Willamette Industries
Wolfe's Guide Service
Woody Contracting, Inc.
Woolley Enterprises, Inc.
WTD Industries, Inc.

Other Organizations

1000 Friends Of Oregon
1000 Friends Of The Earth
Alameda Creek Alliance
Allegheny Defense Project
Alpine Lakes Protection Society
Altacal Audubon Society Inc
American Alpine Institute
American Fisheries Society
American Lands
American Lands Alliance
Ancient Forest Defense Fund
Applegate Partnership
Applegate River Watershed Council
Arc-En-Ciel
Association of Northwest
Steelheaders
Association of Oregon Counties
Audubon Society
 Black Hills
 Columbia Gorge
 Corvallis
 Golden Gate
 Grays Harbor
 Kalmiopsis
 Kitsap
 Kittitas
 Klamath Basin
 Leavenworth

National
N. Central Washington
Pilchuck
Rainier
Redwood Chapter
Rogue Valley
San Juan Islands
Seattle
Siskiyou
Spokane
Umpqua Valley
BARK
Baron Family Partnership
Basketweavers Project
Bike To Nature
Biodiversity Northwest
Blue Ribbon Coalition
Breitenbush Community
Breitenbush Hot Springs
Butte Falls Advocates
California Cattlemens Association
California Coalition for Alternatives
to
Pesticides
California Lichen Society
California Native Plant Society
California Trout
California Wilderness Coalition

Californians For Alternatives to
Toxins
Cascadia Forest Alliance
Cascadia Wildlands Project
CATs
Central Cascades Alliance
Central Oregon Motorcycle and ATV
Club
Central Valley WQCB
Cheetwoot Wilderness Alliance
Citizens For Better Forestry
Citizens Interested In Bull Run
Clackamas Trout Unlimited
Clackamas-Marion Forest Prot Assn
Claggett Creek Watershed Council
Coast Range Association
Coastal Forest Alliance
Columbia Basin Wildlife Assn.
Communities for a Great Oregon
Concerned Friends of Ferry County
Cottage Grove Historical Society
Deer Creek Vly Ntrl Resrc Conserve
Defenders Of Wildlife
Ducks Unlimited-South Oregon
Earth Justice
EF! Wolf Action Network
Endangered Species Coalition
Environmental Protection

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Proposal to Amend Wording About the Aquatic Conservation Strategy

Information Center
 Environmental Resources Ctr
 Essex Junction
 Environmental Group
 Forest Conservation Council
 Forest Guardians
 Forest Issues Group
 Forest Landowners of California
 Four Runners Four Wheel Drive Club
 Franciscan Sisters of the Poor
 Friends Of Clackamas River
 Friends Of Del Norte County
 Friends Of The Greensprings
 Friends Of The River
 Friends Of Trees
 Gifford Pinchot Task Force
 Global Peoples Assembly Network
 Great Lake United
 Headwaters
 High Country Citizens Alliance
 High Desert Trail Riders
 Hood Canal Coordinating Council
 Inland Empire Public Lands Council
 Institute for Applied Ecology
 Institute for Policy Research
 Izaak Walton League of America
 John Muir Project
 Keep Oregon Green
 Kettle Range Conservation Group
 Klamath Basin Snowdrifters
 Klamath Forest Alliance
 Klamath Siskiyou Wildlands Center
 Klamath Yacht Club
 La Canada Flintridge Trails Council
 Land & Water Fund Of The Rockies
 Lassen Forest Preservation Group
 League Of Wilderness Defenders
 Little River Committee
 M.U.D.D.
 Mattole Salmon Group
 Mazama Conservation Committee
 Mckenzie Guardians
 Mckenzie River Trust
 Mckenzie Watershed Council
 Mendocino Environmental Center
 Moose School Productions
 Mt. Adams Adopt-A-District
 Mt. Mazama Mushroom Association
 National Forest Protection Alliance
 National Wildlife Federation
 Native Fish Society
 Native Plant Society

Oregon
 Siskiyou
 Native Sky Wildlife Sanctuary
 Nature Conservancy
 Nature Society
 NCASI West Coast Regional Center
 North Coast Recreation Coalition
 Northwest Coalition For Alternatives To Pesticides
 Northwest Ecosystem Alliance
 Northwest Environmental Defense Fund
 Northwest Old-Growth Campaign
 Northwest Rafters Association
 Nuvview -Evaluation & Learning
 Oak Ridge National Laboratory
 OFREG
 Olympic Forest Coalition
 Olympic Park Associates
 Orca Quest
 Oregon Bicycling Advisory Committee
 Oregon Cattlemans Association
 Oregon Coast Mycological Society
 Oregon Council Rock and Mineral Clubs
 Oregon Council Trout Unlimited
 Oregon High Desert Museum
 Oregon Historical Society
 Oregon Hunters Association
 Oregon Independent Miners/BMOA
 Oregon Institute of Technology
 Oregon Lands Coalition
 Oregon Mycological Society
 Oregon Natural Desert Association
 Oregon Natural Resources Council
 Oregon Park Associates
 Oregon Sheep Growers Association
 Oregon Small Woodlands Association
 Oregon Trail Coordinating Council
 Oregon Trout
 Oregon Waterfowl and Wetlands
 Oregon Wildlife Federation
 Oregonians for Action
 Oregonians for Food and Shelter
 Ouachita Watch League
 Pacific Biodiversity Institute
 Pacific Coast Federation of Fisherman's Assn.
 Pacific Crest Trail Association
 Pacific Northwest 4 Wheel Drive Assn.
 Pacific Rainforest Wildlife Guardians

Pacific Rivers Council
 Pacific Wildlife Research
 PEER
 People for the USA Happy Camp
 Predator Conservation Alliance
 Public Lands Foundation
 Reed College Forest Watch
 Rocky Mountain Ecosystem Defense
 Rogue Fly Fishers
 Roseburg Resources
 Rural Information Network
 Save Our Klamath Jobs
 Seattle Lichen Guild
 Shenandoah Ecosystems Defense Group
 Sierra Club
 Cascade Chapter
 Illinois Valley
 Many Rivers Group
 Northern Great Plains
 Northwest
 New York City Chapter
 Plant Society
 Rogue Group
 Tillamook
 Yahi Group
 Sierra Club Legal Defense Fund
 Siskiyou Project
 Siskiyou Regional Education Project
 Smith River Alliance
 SOCATS
 Society for Range Management
 Society of American Foresters
 South Carolina Forest Watch
 Southern Apalachian Biodiversity Project
 Southern Oregon Alliance for Resources
 Southern Oregon Forest Coalition
 Southern Oregon Timber Industry Association
 Southern Willamette Earth First!
 Steamboaters
 Stillwater Sciences
 Stop Oregon Litter and Vandalism
 Sutherlin Watershed Action Committee
 Takilma Watershed Committee
 TELAV
 The Bot Works, Inc.
 The Cascadians
 The Ecology Center
 The Lands Council
 The Mountaineers

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The Nature Conservancy
The Ptarmigans
The Wilderness Society
The Wildlife Society, Oregon Chapter
Trees of Mystery
Trout Unlimited
Umpqua Watersheds, Inc.
United Anglers of California
University of Oregon, Survival Center
Vancouver Wildlife

Washington Wilderness Coalition
Washington State Hi-Lakers
Washington State Snowmobile Association
Washington Trout
Washington Wilderness Coalition
Water For Life
WELC
West Montana Mycological
Western Environmental Law Center
Western Fire Ecology Center

Western Forest Industries Association
Western Forestry & Conservation Association
Western Mining Council
Wilderness Watch, NW Chapter
Willits Environmental Center
World Wildlife Fund
Xerces Society

Libraries, Schools, and Universities

Aberdeen Timberland Library
Albany City Library
Albina Library
Algona-Pacific Library
Amanda Park Timberland Library
Applegate Branch Library
Arcata Branch Library
Ashland Public Library
Auburn Library
Bandon Public Library
Battleground Library
Bellevue Regional Library
Bend Public Library
Black Diamond Library
Blemont Library
Bleyhl Community Library
Blue Lake Branch Library
Bothell Regional Library
Boulevard Park Library
Brownsville Public Library
Buena Library
Burien Library
Butte County Library
C Giles Hunt Memorial Library
California State University, Chico
Camas Public Library
Canyonville Branch Library
Capitol Hill Library
Carnation Library
Carpenter Memorial Library
Cascade Foothills Library
Cascade Locks Library
Cascade Pacific Library Network
Cascade Park Library
Central Library
Central Washington University
Chemult Branch Library
Chetco Public Library
City Of Eugene Library
City Of Springfield Library
Clallam Bay Library

Clark College Cannell Library
Colorado State University Libraries
Columbia Gorge
Community College
Coos Bay Public Library
Coquille Public Library
Corning City Library
Corvallis Benton Public Library
Cottage Grove Public Library
Cottonwood Library
Covington Library
Curry County Public Library
Dallas Library
Del Norte County Library District
Des Moines Library
Douglas County Library System
Dufur Community Library
Dunsmuir Library
Duvall Library
Eastern Washington University
Ellensburg Library
Entiat Public Library
Eugene Public Library
Everett Library Main Branch
Evergreen State College
Fairview-Columbia Library
Fairwood Library
Fall City Library
Fall River Library
Federal Way 320th Library
Federal Way Regional Library
Ferndale Branch Library
Flora M Laird Memorial Library
Forks Library
Fort Bragg Library
Fort Jones Branch Library
Fortuna Branch Library
Foster Library
Ft Vancouver Regional Library
Garberville Branch Library
Glendale Branch Library

Gold Beach Public Library
Goldendale Library
Granger Library
Grants Pass Library
Gregory Heights Library
Gresham Library
Happy Camp Library
Harrah Library
Hazel M Lewis Library
Hillsdale Library
Holgate Library
Hollywood Library
Hood River County Library
Hoodsport Timberland Library
Hoopa Branch Library
Hoquim Timberland Library
Humboldt County Library
Humboldt State University
Issaquah Library
Jackson County Library System
Jacksonville Public Library
Jefferson Co Library
Jefferson Public Library
Josephine County Library
Keizer Reading Connection
Kenmore Library
Kent Regional Library
Kingsgate Library
Kirkland Library
Klamath County Library
Klamath Union High School
Lacey Timberland Library
Lake County Library
Lake Forest Park Library
Lake Hills Library
Lakeport Library
Land-Air-Water Law Center
Lane Community College Library
Lapine Public Library
Lebanon Library
Lyons Public Library

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Mabton Library	Redbud Library	Sunnyside Library
Maple Valley Library	Redmond Public Library	Sunriver Area Public Library
Mazama High School	Redmond Regional Library	Susanville District Library
Mccloud Branch Library	Reedsport Branch Library	Sweet Home Public Library
Mckinleyville Branch Library	Richmond Beach Library	Tehama County Library
Medford Library	Riddle Branch Library	Terrace Heights Library
Mercer Island Library	Ridgefield Library	The Dalles-Wasco County Library
Middletown Library	Rio Dell Branch	Three Creeks Library
Midland Library	Rockwood Library	Tieton Library
Mildred Whipple Library (Drain Branch)	Roseburg Library	Tillamook County Library
Mill City Public Library	Roslyn Library	Toppenish Library
Modoc County Library	Round Valley Public Library	Trinidad Elementary School Library
Montague Branch Library	Ruch Branch Library	Trinity County Library
Mosier Public Library	Salem Public Library	Tukwila Library
Moxee Library	Salem State College, Dept Of Geography	Tulelake Library
Mt. Shasta Library	Sammamish Library	Ukiah Library
Muckleshoot Library	Seattle Public Library	Union Gap Library
Myrtle Creek Branch Library	Selah Library	University of Oregon Library
Naches Library	Sellwood-Moreland Library	University of California
Newport Way Library	Sequim Library	University of Washington
Nile Library	Shasta Bible College Library	Upper Lake Library
North Bend Library	Shasta College Library	Valley View Library
North Bend Public Library	Shasta County Library	Vancouver Library
North Bonneville Library	Shasta Lake Gateway Library	Vashon Library
North Central Regional Library System	Shelton Timberland Library	Wapato Library
North Portland Library	Shingletown Library	Washington State University Library
North State Coop Library System	Shoreline Library	Washougal Library
Northwest Library	Simpson College & Graduate School	West Salem Library
Oak Run Community Library	Siskiyou County Library	White Center Library
Oakland Branch Library	Sisters Public Library	White Salmon Valley Library
Oakridge City Library	Siuslaw Public Library District	White Swan Library
Olympia Timberland Library	Skykomish Library	Willits Library
Oregon Institute Of Technology	Skyway Library	Willow Creek Branch
Oregon State University	Snoqualmie Library	Willows Public Library
	Southeast Yakima Library	Winston Branch Library
	Southern Oregon University	Woodinville Library
	Southwest Oregon Community College Library	Woodland Library
Orland City Library	Springfield Public Library	Woodmont Library
Parkdale Library	St. Johns Library	Woodstock Library
Peninsula College	State of Illinois University	World Botanical Association
Plumas County Library	Stayton Public Library	Yakima Valley Regional Library
Port Angeles Library	Stevenson Library	Yoncalla Branch Library
Port Townsend Library	Summit View Library	Yreka Library
Quinney Natural Resources Library		Zillah Library
Red Bluff Library		

Media

Ashland Daily Tidings	The Chronicle	News Review
Environmental Media Services	The Columbian	
The Associated Press	KMTX TV	

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 Bill Elder
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